

Department of Engineering

STANDARD

SPECIFICATIONS

AUGUST 1, 1983

City of Newport News Virginia

City of Newport News

STANDARD SPECIFICATIONS

July 25, 2012

ADDENDUM No. 14

The City has adopted the technical provisions of HRPDC Regional Standards as modified by Newport News Special Provisions. Accordingly, the following sections are hereby **removed** from the City's Standard Specifications: **Part Two - Incidental Construction, Part Three - Principal Construction, and Part Four - Standard Drawings**. Any addenda related to Parts Two thru Four are rescinded. You are directed to incorporate this page into your copy of the City of Newport News' Standard Specifications, dated August 1, 1983. This revision is hereby part of the Standard Specifications.

Everett P. Skipper, PE, BCEE Director of Engineering

City of Newport News

STANDARD SPECIFICATIONS

January 25, 2007

ADDENDUM No. 12

The purpose of this addendum is to advise that Pages 22 and 23 of Section 1003.9, Payment for extra work, and Page 57 of Section 1009.13, Payment of obligations of the Standard Specifications, have been revised as attached. You are directed to incorporate these pages into your copy of the City of Newport News' Standard Specifications, dated August 1, 1983. This revision is hereby part of the Standard Specifications.

Director of Engineering

If the City shall determine the conditions to be such as to justify a claim for additional compensation, it may provide for additional payment as specified in Article 1003.9 for the particular phase of work in question, or by any other equitable arrangement mutually agreed upon by the City and Contractor. In the event, the Contractor shall not be relieved, unless permitted to do so by the City, from his obligation of resuming construction operations pending a decision as to the validity of a claim, or pending the execution of a negotiated agreement to cover additional costs if a claim shall be recognized under the provisions of this section of the specifications.

- Claim for unauthorized extra work: If the Contractor performs work which he considers is not included under any of the items of the contract and which has not been specifically ordered in writing by the City as extra work, he may make a claim for extra payment for such work by immediate oral notice followed by written notice within seven (7) days after the occurrence to the City, with detailed cost data to support his claim within thirty (30) days after the said work is performed.
- Disputed work: If unable to reach agreement under any of the foregoing procedures, the City may direct the Contractor to proceed with the work. Payment shall be as later determined.

Although not to be construed as proceeding under extra work provisions, the Contractor shall keep and furnish records of all disputed work.

Extra work: Any extra work made necessary by alteration of or additions to the plans or by other reasons for which no price is provided in the contract, shall be performed by the Contractor as directed by the Engineer and he shall be compensated therefore as elsewhere provided herein.

Minor changes in the work not involving extra cost and not inconsistent with the purpose of the work may be made by verbal order, but no modifications involving extra work shall be made unless ordered in writing by the City.

1003.9 Payment for extra work:

- A. The Contractor agrees that he will accept as full compensation for extra work, the unit prices bid, where such are applicable; and for such items where not properly covered by unit prices, a lump sum or additional unit price agreed upon as reasonable by the City and the Contractor.
- B. If an agreement cannot be made on payment for extra work on a unit price or lump sum basis, the Contractor will accept as full

22 Revised 12/06

compensation the reasonable cost, as determined by the City, the direct costs (all necessary labor, including insurance and payroll taxes, equipment rental and materials) of such work, as mutually agreed upon or otherwise as determined in accordance with the Contract Document, and no more than a total of 15% of the direct costs for the Contractor's overhead and profit. The contractor shall provide the City with detailed breakdown (with supporting invoices and documentation) of all costs associated with the extra work.

C. In any case such change involves extra work which is performed by a previously approved Subcontractor, the Subcontractor shall be allowed: the direct cost (all necessary labor, including insurance and payroll taxes, equipment rental and materials) associated with such work, and no more than a total of 12.5% for overhead and profit. The Contractor will accept as full compensation the reasonable cost, as determined by the City, the amount paid by the Contactor to the Subcontractor for such extra work, and no more than a total of 7.5% to cover the Contractor's overhead and profit. The contractor shall provide the City with detailed breakdown (with supporting invoices and documentation) of all costs associated with the extra work.

The Contractor agrees to prosecute such extra work with all reasonable diligence, and to employ competent workers. The Contractor shall give the City access to all accounts, bills, payrolls and vouchers relating to extra work not covered by unit prices, and he agrees that he shall have no claim for compensation for such extra work in the case items not covered by unit prices unless a statement in writing of the actual direct cost of the same, fully itemized, is presented to the City before the thirtieth (30th) day of the month following that during which each specific order was complied with him.

END OF SECTION

23 Revised 12/06

Failure to make prompt payment of any claim when due, for labor or service supplied for the prosecution of work under the contract, including labor or material supplied by sub-Contractors, may necessitate City paying such claim to the person furnishing the labor or services and charging the amount of payment against funds due or to become due to the Contractor by reason of his contract. Such payment shall not relieve the Contractor of his surety from obligations with respect to any unpaid claims. As an option, the City may issue a two-party check payable to both the Contractor and Subcontractor making the claim for payment.

1009.14 <u>Public safety and convenience:</u> The Contractor shall conduct the project with proper regard for the safety and convenience of the public. When the project involves use of publicways, Contractor shall provide necessary flagmen and install and maintain means of free access to all fire hydrants, service stations, warehouses, stores, houses, garages and other property.

Private residential driveways shall be closed only with approval of the Engineer and notification to property resident. The Contractor shall not interfere with normal operation of public transit vehicles unless otherwise authorized. The Contractor shall not obstruct or interfere with travel over any public street or sidewalk without approval. Where detours are necessary, they shall be maintained with good surface and shall be clearly marked. The Contractor shall provide open trenches, excavations, or anything that would impede the normal use of the right-of-way with adequate barricades of an approved type which can be seen from a reasonable distance. At night, the Contractor shall barricade all areas restricted from public use within the construction area. The Contractor shall observe all safety instructions received from the Engineer but following of such instructions shall not relieve the Contractor from the responsibility or liability for accidents to workers or damage or injury to person or property.

Emergency traffic such as police, fire and disaster units shall be provided reasonable access to the work area at all times.

The Contractor shall be liable for any damages which may result from failure to provide such reasonable access or failure to notify the appropriate authority.

City of Newport News

STANDARD SPECIFICATIONS

August 10, 1999

ADDENDUM No. 11

The purpose of this addendum is to advise that Page 65 of Section 1010.7, Liquidated Damages, of the Standard Specifications, has been revised as attached. You are directed to incorporate this page into your copy of the City of Newport News' Standard Specifications, dated August 1, 1983. This revision is hereby part of the Standard Specifications.

Mostafa A. Sabbah, Ph.D., P.E.

Director of Engineering

STANDARD SPECIFICATIONS

MAY 2, 1991

ADDENDUM NO. 10

The purpose of this Addendum is to advise that Pages 30 and 31 of Section 1004.13B, Traffic Control, of the Standard Specifications, has been revised as attached. Also, Page 72, Section 1011.3, Payment, third paragraph, has also been revised as attached. You are directed to incorporate these pages into your copy of the City of Newport News' Standard Specifications, dated August 1, 1983. This revision is hereby part of the Standard Specifications.

Director of Engineering

STANDARD SPECIFICATIONS

NOVEMBER 21, 1990

ADDENDUM NO. 9

The purpose of this Addendum is to advise you that Page 73A, Section 1012, Payment to Subcontractors, has been added and made a part of the Standard Specifications. You are directed to incorporate this page into your copy of the City of Newport News' Standard Specifications, dated August 1, 1983. This revision is hereby part of the Standard Specifications.

Mostafa A. Sabbah, Ph.D., P.E. Director of Engineering

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STANDARD SPECIFICATIONS

MAY 21, 1990

ADDENDUM NO. 8

The purpose of this Addendum is to advise that Page 62, Section 1010.4, Contract Time, has been revised in accordance with the attached. You are requested to insert the revised Page 62 into your document. Additionally, you are provided with revised Private Entrance Drawing No. 4026 and a new Private Entrance Drawing 4026A. This revision is hereby part of the Standard Specifications.

> Mostafa A. Sabbah, Ph.D., P.E.

Director of Engineering

CITY OF NEWPORT NEWS STANDARD SPECIFICATIONS

SEPTEMBER 1, 1987

ADDENDUM NO. 7

The purpose of this addendum No. 7 is to advise you that pages 58 and 65 of the Standard Specifications have been revised and plate 4010.1 has been added and made a part of the Standard Specifications. You are directed to incorporate these pages into your copy of the City of Newport News Standard Specifications, dated August 1, 1983.

Mostafa A. Sabbah, Ph.D., P.E.

Director of Engineering City of Newport News

STANDARD SPECIFICATIONS

NOVEMBER 14, 1986

ADDENDUM NO. 6

Please be advised that revisions dated November 12, 1986, have been made to Sheet 14, enclosed herewith. You are directed to substitute the revised sheet in your copy of the City of Newport News Standard Specifications, dated August 1, 1983.

Mostafa A. Sabbah, Ph.D., P.E.

Director of Engineering

STANDARD SPECIFICATIONS

NOVEMBER 21, 1984

ADDENDUM NO. 4

Please be advised that revisions dated October 30, 1984 have been made to the sheets listed below:

31 Sheet Sheet 153 Sheet 217

Also Section 3307, Pavement Repairs, is hereby made a part of the Standard Specifications.

Sheet 218 Sheet 219 Sheet 220 Sheet 221 Sheet 222 Sheet 223

You are directed to make the appropriate substitutions and additions to the Standard Specifications dated August 1, 1983.

> 0000 Mostafa A. Sabbah, Ph.D., P. E. Director of Engineering

MAS/JES/plw

STANDARD SPECIFICATIONS

JANUARY 3, 1984

ADDENDUM NO. 2

Please be advised that revisions dated November 1, 1983, have been made to the sheets listed below. You are directed to substitute the revised sheets in the standard specifications, dated August 1, 1983.

Forewo	ord	Plate	4016
Sheet	4	Plate	4017
Sheet	5	Plate	4018
Sheet	10	Plate	4019
Sheet	14	Plate	4020
Sheet	24	Plate	4021
Sheet	25	Plate	4022
Sheet	32	Plate	4023
Sheet	54	Plate	4024
Sheet	59	Plate	4025
Sheet	67	Plate	4026
Sheet	69	Plate	4027
Plate	4001	Plate	4028
Plate	4002	Plate	4029
Plate	4003	Plate	4030
Plate	4004	Plate	4031
Plate	4005	Plate	4032
Plate	4006	Plate	4033
Plate	4007	Plate	4034
Plate	4008		
Plate	4009		
Plate	4010		
Plate	4011		
Plate	4012		
Plate	4013		
Plate	4014		
Plate	4015	~~	

Mostafa A. Sabbah P.E. Director of Engineering

STANDARD SPECIFICATIONS

AUGUST 1, 1983

ADDENDUM NO. 1

Please be advised that revisions dated August 25, 1983, have been made to the sheets listed below. You are directed to substitute the revised sheets in the standard specifications, Dated August 1, 1983.

Cover	Sheet	Sheet	68
Sheet	11	Sheet	69
Sheet	17	Sheet	130
Sheet	27	Sheet	133
Sheet	64	Plate	4001

Mostafa A. Sabbah, P. E.
Assistant Director of Public
Works for Engineering



City Of Newport News

Wirginia 23607

Office of the City Manager

2400 Washington Avenue [804] 247-8411

FOREWORD

This 1983 edition of the City of Newport News Standard Specifications was compiled by the Department of Engineering for uniformity in engineering and construction practices. Standardized specifications eliminate confusion, conflict and in effect lower construction costs. It represents many hours in researching, reviewing, writing, editing and preparing the drafts for this edition which incorporates current construction practices and new technological advances.

For every City of Newport News sponsored Engineering project and for work being done under permit issued by the City, these "Standard Specifications" along with other Contract Documents (as defined herein), Federal and State Laws, and the codes and ordinances of the City of Newport News, shall govern the project (work), and shall be considered as a whole.

The City expresses its appreciation to those who contributed their expertise, time and resources to complete this endeavor.

The Department of Engineering will maintain a register of all persons or agencies holding copies of these specifications. Revisions thereto, as printed, will be mailed to holders of record at the address on file in the office of Engineering. Please notify Engineering of any change of address.

Sincerely,

Robert T. Williams

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City Manager

TABLE OF CONTENTS

PART ONE - GENERAL REQUIREMENTS

SECTION	TITLE	PAGE	
1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010	TERMS, DEFINITIONS AND ABBREVIATIONS PROPOSAL REQUIREMENTS AWARD AND EXECUTION OF CONTRACT SCOPE OF WORK CONTROL OF WORK CONTROL OF MATERIALS TESTING LABORATORY SERVICES SUBMITTALS AND SUBSTITUTIONS REFERENCE SPECIFICATIONS LEGAL RELATIONS AND RESPONSIBILITIES PROSECUTION AND PROGRESS OF WORK MEASUREMENT AND PAYMENT	2 9 16 19 24 35 38 42 48 52 61 71	
PART TWO - INC	CIDENTAL CONSTRUCTION		
SECTION	TITLE	PAGE	
2000 2100 2200 2300 2400	CLEARING AND GRUBBING EXCAVATION AND EMBANKMENT ENVIRONMENTAL CONSIDERATIONS TOPSOIL AND SEEDING MINOR STRUCTURES	75 77 80 82 91	
PART THREE - PRINCIPLE CONSTRUCTION			
SECTION	TITLE	PAGE	
3000 3100 3200 3300	STORM SEWERS SANITARY SEWERS PUMP STATIONS STREETS	107 125 141 153	
PART FOUR - ST	ANDARD DRAWINGS		
PLATE NO.	TITLE		
4001 4002 4003 4004 4005 4006 4007 4008 4009 4010	PRE-CAST MANHOLE PRE-CAST MANHOLE WITH MONOLITHIC EXTENDED DROP EXTERNAL DROP CONNECTION CAST-IN-PLACE BRICK MANHOLE (CROSS-SECTION) CAST-IN-PLACE BRICK MANHOLE (PLAN VIEW) STANDARD SHALLOW MANHOLE DETAILS OF MANHOLE CASTING DETAILS OF MANHOLE COVER DETAILS OF MANHOLE STEPS HOUSE LATERAL DETAIL		

PLATE NO.	TITLE				
4011	FORCE MAIN CONNECTION TO MANHOLE				
4012	DETAILS OF AIR RELIEF VALVE				
4013	DETAILS OF AIR RELIEF VALVE DETAIL OF BLOW-OFF				
4014	DETAILS OF FORCE MAIN BEND ANCHORAGE				
4015	DETAILS OF FORCE MAIN BEND ANCHORAGE DETAIL OF BEDDING FOR SANITARY SEWER PIPE				
4016	DETAIL OF PILE BENT SUPPORT UNDER PIPE				
4017	STANDARD PLAIN DROP INLET				
4018	STANDARD CURB CATCH BASIN				
4019	STANDARD CATCH BASIN CASTING AND COVER				
4020	TYPICAL EARTH SWALE SECTION				
4021	STANDARD HALF PIPE INSTALLATION				
4022	STANDARD PAVED DITCH				
4023	STANDARD SIDEWALK DRAIN TROUGH				
4024	STANDARD COMBINATION CURB AND GUTTER AND MEDIAN CURB				
4025	STANDARD PRIVATE ENTRANCE FOR STREETS WITH CURB AND GUTTER				
4026	STANDARD PRIVATE ENTRANCE FOR STREETS WITHOUT CURB AND				
	GUTTER				
4027	STANDARD COMMERCIAL ENTRANCE				
4028	STANDARD "L" INTERSECTIONS				
4029	STANDARD CUL-DE-SACS				
4030	STANDARD RIGHT-OF-WAY MONUMENTS				
4031	TYPICAL SECTION FOR MAJOR ARTERIAL STREETS				
4032	TYPICAL SECTION FOR ORNAMENTAL PARKWAY (MINIMUM 70'				
	RIGHT OF WAY)				
4033	STANDARD STREET SECTION (60' RIGHT OF WAY, 44' STREET)				
4034	STANDARD STREET SECTION (50° RIGHT OF WAY, 36° STREET)				

PART ONE GENERAL REQUIREMENTS

SEC. 1000 TERMS, DEFINITIONS AND ABBREVIATIONS

1000.1 TERMS 1000.2 DEFINITIONS 1000.3 ABBREVIATIONS

Section 1000

TERMS, DEFINITIONS AND ABBREVIATIONS

In the interpretation of the Contract Documents and the construction operations governed by said documents, the following terms, definitions, and abbreviations, or pronouns in place of them shall each be construed as defined below, unless otherwise stated.

1000.1 Terms: The words directed, required, permitted, ordered, instructed, designated, considered necessary, prescribed, approved, acceptable, satisfactory or words of like import, refer to actions, expressions, and prerogatives of the Engineer.

Command type sentences are used throughout the Contract Documents. In all cases the command expressed or implied is directed to the Contractor.

1000.2 Definitions:

Acts of God: An act of God is to be construed to mean a flood, cloudburst, tornado, hurricane or other phenomenon of nature of catastrophic proportions of intensity, but not normal rain or snowfall.

Addendum: A modification of the Contract Documents issued in writing by the City prior to the opening of bids.

Advertisement, Notice to Contractors: The public announcement inviting bids for work to be performed or materials to be furnished.

Approved Equal: A product, component or process whose use in or on a particular project is specified as a standard for comparison purposes only. The "equal" product, component or process shall be the same or better than that named in function, performance, reliability, quality and general configuration. Determination of equality in reference to the project design requirements will be made by the Engineer.

Attorney: The City Attorney as appointed by the Incorporated City of Newport News.

Authorized Representative: Any person, persons or firms duly authorized by the City.

Bidder: Any individual, firm, partnership or corporation submitting a proposal in response to the Notice to Contractors calling for bids on the work contemplated.

Calendar Day: Any day shown on the calendar beginning and ending at midnight.

Change Order: A written order, approved by the City and issued by the Engineer to the Contractor, covering changes in the Contract Documents after award of contract.

City: The incorporated City of Newport News, Virginia, acting through its duly authorized officials, officers, employees or representatives.

Codes: Applicable local, State and Federal codes under which the work is to be performed.

Contract: A part of the Contract Documents which stipulates conditions on which the work is agreed to be performed, executed by the City and the Contractor.

Contract Documents: The written agreement covering the performance of the work, the Notice to Contractors, special provisions, proposal, plans (drawings), all specifications, addenda, permits, contract, contract bonds, change orders in the course of the work, and any approved revisions made during the performance of the work to any of the above listed documents.

The Contract Documents are complimentary and what is called for by one shall be as binding as if called for by all. In case of discrepancies, specifications shall govern over plans, supplemental specifications shall govern over standard specifications, and special provisions shall govern over all specifications and plans. In case of any ambiguity or dispute over interpretation of the provisions of the Contract Documents, the decision of the Director of Engineering shall be final.

Contract Item: A specific unit of work for which a price or basis of payment is provided in the contract.

Contract Price: The total amount of money for which the contract is awarded.

Contractor: Any individual, firm, partnership, corporation or any combination thereof who has entered into the contract with the City. In case of work being done under permit issued by the City, the permittee shall be construed to be the Contractor.

Director of Engineering: The duly appointed Director of Engineering for the Incorproated City of Newport News or his authorized representatives. The decision of the Director of Engineering shall be final.

Easement: A grant of a right of use of the property of an owner for specific limited use.

Engineer: The Director of Engineering either directly or through his authorized representatives and designated by the City to supervise the work during its execution.

Extra Work: An item of work not provided for in the Contract as awarded but determined by the Engineer as essential to the proper completion of the contract within its intended scope.

Inspector: The authorized representative of the Engineer entrusted with making detailed inspections of the work or materials.

Labor and Material Payment Bond: The form of security approved by the City, furnished by the Contractor and his surety, to guarantee the payment of all persons supplying labor and materials in the prosecution of the work in accordance with the terms of the Contract Documents.

Liquidated Damages: The amount prescribed in the Contract Documents to be paid the City, or to be deducted from any payments due or to become due the Contractor for each day's delay in completing the whole or any specified portion of the work beyond the time allowed in the Contract Documents.

Lump Sum: A method of payment providing for one all inclusive cost for the work or for a particular portion of the work.

Notice: A written communication delivered to the authorized individual, member of the firm or officer of the corporation for which it is intended. In the case of a contract with two (2) or more persons, firms or corporations, notice to one shall be deemed notice to all, unless otherwise specified in the Contract Documents.

- 1) Notice to Award: A written notice from the City to the Contractor informing him that the contract has been awarded to him and that he should begin execution of the Contract Documents.
- 2) Notice to Proceed: A written notice to the Contractor from the City, designating the date the contract term is to begin and the date for final completion of the contract requirements.

Performance Bond: The form of security approved by the City, furnished by the Contractor and his surety, guaranteeing the complete and faithful performance of all the obligations and conditions placed on the Contractor by the Contract Documents.

Plans: The drawings, profiles, cross-sections, working drawings, and supplemental drawings, or reproductions thereof, which show the location, character, dimension and details of the work to be performed. Plans may either be bound in the same book as the balance of the Contract Documents or bound in separate sets, and are a part of the Contract Documents, regardless of the method of binding. Plan is used interchangeably with drawings and construction drawings throughout these documents.

Proposal: The offer of the bidder to perform work at the prices quoted, submitted on the City's official proposal form, properly signed and guaranteed.

Proposal Guaranty, Bid Bond: Cash, bond, cashier's or certified check accompanying the proposal submitted by the bidder as a guaranty that he will enter into contract with the City for performance of the work if the contract is awarded to him.

Reference Specifications: Bulletins, standards, rules, methods of analysis or test, codes and specifications of other agencies, engineering societies, or industrial associations referred to in the Contract Documents and as described in Section 1008.

Rights of Way: A general term denoting land, property or interest therein, acquired for or devoted to public use.

Roadway: That portion of the highway included between curbs, gutters, or ditches, intended primarily for vehicular traffic, and including all pertinent structures and other features necessary for proper drainage and protection.

Special Provisions: Requirements peculiar to the project and which are not otherwise thoroughly or satisfactorily detailed and set forth in the standard specifications.

Standard Plans or Drawings: Details of structures, devices, or instructions adopted by the City as a standard and referred to in the Contract Documents by title or number.

Standard Specifications: The terms, directions, provisions and requirements set forth in this document, together with all subsequent addenda and supplements thereto identified as such.

State: The Commonwealth of Virginia.

Sub-contractor: An individual, partnership, firm, corporation, or any acceptable combination thereof, or joint venture to whom the Contractor sublets part of the contract.

Supplemental Specifications: Supplemental specifications are those adopted subsequent to the standard specifications and generally involve alterations and new construction items, or substantial changes in the standard specifications.

Surety: Any individual, firm or corporation, authorized to do business in the State, bound with and for the Contractor for the acceptable performance, execution and completion of the work, and for the satisfaction of all obligations incurred.

Unit Price: A contract item of work providing for payment based on a specified unit of measurement; e.g. linear foot or cubic yard.

Utility: Tracks, overhead or underground wires, pipelines, conduits, ducts, or structures, owned, operated or maintained in or across public or private rights of way or easements.

Work: That which is proposed to be constructed or performed under the contract or permit, including the furnishing of all material, labor, tools, machinery and appurtenances necessary to complete the contract.

Working Drawings (Shop Drawings): Stress sheets, shop drawings, erection plans, falsework plans, framework plans, cofferdam plans, bending diagrams for reinforcing steel, or any other supplementary plans or similar data which the Contractor is required to submit to the Engineer for approval.

1000.3 <u>Abbreviations</u>: The abbreviations herein, together with others in general use, are applicable to these standard specifications, to project plans, and other Contract Documents.

Abbreviation Word or Words Aband. Abandon, Abandoned ABS Acrylonitrile - butadiene - styrene Alt. Alternate Bdry. Boundary B.M. Benchmark C.A.P. Corrugated aluminum pipe Corrugated aluminum pipe California Bearing Ratio Cast iron pipe Cleanout C.B.R. C.I.P. Cleanout Concrete Construct, Construction Corrugated steel pipe Cubic yard Drop inlet Ductile iron pipe Drawing End of curb return Energy grade line Extra strength vitrified clay C.L. Cleanout Conc. Const. C.S.P. C.Y. D.I. D.I.P. Dwg. E.C.R. E.G.L. E.S.V.C.

<u>Abbreviations</u>	Word or Words
Exc.	Excavated
G.I.P.	Galvanized iron pipe
Gr.	Grade
G.S.P.	Galvauized steel pipe
Hdwl.	Headwall
H.G.L.	Hydraulic grade line
Horz.	Horizontal
Inv.	Invert
I.P.	Iron pipe
L.S.	Lump sum
L.F.	Linear foot
M.H.	Manhole
P.I.	Point of intersection
P.C.	Beginning of curve
P.C.R.	Beginning of curve return
P.L.	Property line
P.O.C.	Point on curve
P.O.T.	Point on tangent
P.T.	Point of tangency
P.V.C.	Polyvinyl chloride
Pvmt.	Pavement
R.	Radius
R.C.P.	Reinforced concrete pipe
Ref.	Reference
Reinf.	Reinforced or reinforcement
R.R.	Railroad
R/W	Right of way
SDR	Standard thermoplastic pipe dimension
Spec.	Specifications
S.S.	Sanitary sewer
Std.	Standard
S.Y.	Square yard
Tan.	Tangent
T.C.	Top of curb
V.D.H.&T.	Virginia Department of Highways and Transportation
Vert.	Vertical
V.F.	Vertical foot
Vol.	Volume
W.I.	Wrought iron
Y.D.	Yard drain
77	Change coation

END OF SECTION

Cross section

X-sec.

SEC. 1001 PROPOSAL REQUIREMENTS

1001.1	PREQUALIFICATION OF BIDDERS
1001.2	DISQUALIFICATION OF BIDDERS
1001.3	CONTENTS OF PROPOSAL FORMS
1001.4	EXAMINATION OF CONTRACT DOCUMENTS AND
	SITE OF WORK
1001.5	INTERPRETATION OF CONTRACT DOCUMENTS
1001.6	QUANTITIES AND UNIT PRICES
1001.7	PREPARATION OF PROPOSAL
1001.8	PROPOSAL GUARANTY
1001.9	DELIVERY OF PROPOSAL
1001.10	WITHDRAWAL OR REVISION OF PROPOSAL
1001.11	ALTERNATE PROPOSALS
1001.12	OPENING OF PROPOSALS
1001.13	REJECTION OF PROPOSAL

Section 1001

PROPOSAL REQUIREMENTS

Prequalification of bidders: If a contract is for forty thousand dollars (\$40,000) or more, or if the total value of all construction, removal, repair of improvements undertaken by the bidder within any twelve-month period is three hundred thousand dollars (\$300,000) or more, the bidder is required under Title 54, Chapter 7, Code of Virginia (1950), as amended, to show evidence of being licensed as a "Class A Contractor". If a contract is fifteen hundred dollars (\$1,500) or more but less than forty thousand dollars (\$40,000), the bidder is required to show evidence of being licensed as a "Class B Contractor". The bidder shall place on the outside of the envelope containing the bid and shall place in the bid over this signature whichever of the following notations is appropriate:

(1950) as amended."

"Licensed	Class	A Virgin	ia Cont	ractor 1	No.		, 11
"Licensed	Class	B Virgin	ia Cont	ractor 1	No.	ennemacount.der.yeungscheidenspro-toptoloper	. "
"Contract not requir							

The attention of non-resident bidders is directed to the requirements of Section $40.1\text{--}30\,\text{Code}$ of Virginia which provides that all non-resident employers performing any demolition, excavation, installation, paving, repair, maintenance, erection, or construction work within the State when the cost of the undertaking is not less than \$300.00 nor more than \$60,000 must register with the Department of Labor and Industry prior to commencement of such work unless they are registered with the State Registration Board for Contractors.

The bidder must also be qualified by experience, financing and equipment to do the work called for in the plans and specifications. Whenever required in the special provisions, the bidder shall furnish a statement of his construction experience and his general ability to perform the work contemplated, and shall submit same along with his bid proposal.

- 1001.2 <u>Disqualification of bidders</u>: The Director of Engineering in his discretion, may determine that a bidder is not qualified and reject his proposal for any of the following reasons:
 - A. More than one proposal on the same project from a bidder under the same or different names, in which case, all such duplicate proposals shall be rejected.
 - B. Evidence of collusion with any other bidder or bidders. Participants in such collusion shall be

disqualified from submitting bids on any further work for the City until such time as the Engineer shall determine that the bidder or bidders should be reinstated.

- C. If a bidder is not qualified for the work bid upon or to the extent of his bid.
- D. Unsatisfactory performance record, judged from the standpoint of conduct of work, workmanship, or progress, as shown by past or current work for the City.
- E. Uncompleted work, whether for the City or otherwise, which might hinder or prevent the prompt completion of the work bid upon.
- F. Failure to have paid or settled bills for labor or materials on any former or current contracts.
- G. If the bidder has previously defaulted in the performance of a public contract, or has been convicted of a crime arising from the performance of a previous or current public contract.
- H. Any other inability, financial or otherwise, to perform the work.
- I. A bidder not authorized to do business in the Commonwealth of Virginia.
- J. For any other reasons deemed proper as determined from a prepared survey of bidder's capability to perform the work.
- Contents of proposal forms: Upon request, prospective bidders will be furnished with proposal forms which will state the location and description of the contemplated construction and will show the approximate estimate of the various quantities and kind of work to be performed and/or materials to be furnished, with a schedule of items for which unit bid prices are asked.

Proposal forms will be bound with the notice to contractors, contract, bond forms and any special provisions and/or special conditions deemed necessary by the City.

Proposal forms shall not be removed from these bound Contract Documents for submittal of bids. The plans, City of Newport News Standard Specifications and any supplemental specifications thereto, will be considered a part of the Contract Documents whether attached or not.

1001.4 EXAMINATION OF CONTRACT DOCUMENT AND SITE OR WORK: BIDDERS SHALL DETERMINE FOR THEMSELVES THE CONDITIONS AND CIRCUMSTANCES AFFECTING THE PROJECT AND ITS COST, BY

PERSONAL EXAMINATION OF THE ENTIRE CONSTRUCTION SITE, THE CONTRACT DOCUMENTS, AND BY SUCH OTHER MEANS AS THEY MAY CHOOSE. THE SUBMISSION OF A BID WILL BE CONSIDERED CONCLUSIVE EVIDENCE THAT THE BIDDER HAS MADE SUCH EXAMINATIONS AND HAS INVESTIGATED AND IS SATISFIED AS TO THE CONDITIONS TO BE ENCOUNTERED THE CHARACTER, QUANTITY, QUALITY, AND SCOPE OF WORK, THE REQUIREMENTS OF THE CONTRACT DOCUMENTS FOR PERFORMANCE OF THE WORK IN FULL,

It is understood and agreed that information regarding underground or other conditions or obstructions indicated in the Contract Documents has been obtained by the City from data at hand. There is no express or implied agreement that such conditions are fully and correctly shown and the bidder must take into consideration the possibility that conditions affecting the cost or quantity of work may differ from those indicated. No information derived from any inspection of records of investigation compiled by the City, will in any way relieve the bidder or contractor from any risks or from properly performing his obligations under the contract. in the performance of work, methods, materials, labor or equipment are required beyond those anticipated by the bidder, he will not be entitled to additional compensation, unless approved by the Engineer.

The bidder must also be familiar with all Federal, State and local laws, ordinances and regulations which in any manner affect those engaged or employed in the work, the materials, equipment and procedures used in the work, or which in any other way would affect the conduct of the work. He is assumed to be familiar with such laws and regulations, and no plea of misunderstanding or ignorance of the law will be considered. If the bidder, or contractor shall discover any provision in the Contract Documents which is contrary to or inconsistent with any law, ordinance, or regulation, he shall forthwith report it to the City in writing.

Interpretation of Contract Documents: If it should appear 1001.5 to a bidder that the work to be done or matters relative thereto are not sufficiently described or explained in the Contract Documents or that the Contract Documents are not definite and clear, the bidder may make written inquiry regarding same to the Engineer at least seven (7) days before the scheduled closing time for filing bids. Then, if in the judgement of the Engineer, additional information or interpretation is necessary such information will be supplied in the form of an addendum which will be delivered to all individuals, firms and corporations who received Contract Documents. Such addendum shall have the same binding effect as though contained in the main body of the Contract Documents. INSTRUCTION OR INFORMATION CONCERNING THE CONTRACT DOCUMENTS OR THE PROJECT GIVEN OUT BY OFFICERS, EMPLOYEES OR AGENTS OF THE CITY TO PROSPECTIVE BIDDERS SHALL NOT BIND THE CITY.

Any addendum or addenda issued by the Engineer which may include changes, corrections, additions, interpretations or information, and issued seventy-two (72) hours or more before the scheduled closing time for filing bids, Saturday, Sunday and City holidays not included, shall be binding upon the bidder. The City shall send copies of such addenda to all contractors who have obtained copies of the Contract Documents for the purpose of bidding thereon, but failure of the contractor to receive or obtain such addenda shall not excuse him from compliance therewith, if he is awarded the contract.

Failure by the bidder to give written notice and request an interpretation of any alleged ambiguity within the specified time shall waive any right the bidder may have to his own interpretation of the alleged ambiguity, and the true meaning of same shall be according to that interpretation established by the Engineer.

1001.6 Quantities and unit prices: The City reserves the right to increase or decrease the amount of any class or portion of the work. No such change in the work shall be considered as a waiver of any condition of the contract nor shall such change invalidate any of the provisions thereof.

The estimate of quantities of work to be done under unit price bids is approximate and is given only as a basis of calculation for comparison of bids and award of the contract. The City does not by implication agree that the actual amount of work will correspond precisely to the amount as shown or estimated.

The scheduled quantities of work to be done and materials to be furnished may each be increased, decreased or omitted. Payment will be made at unit prices under the contract only for the work performed or materials furnished and accepted.

Bidders must include in their bid prices the entire cost of each item of the work set forth in the proposal, and it is understood and agreed that there is included in each lump sum or unit price bid the entire cost of materials and labor incidental or necessary to the completion of that portion of the work covered, unless such incidental work is expressly included in other lump sum or unit price bids in the proposal.

Preparation of proposal: Each proposal shall be on the forms furnished by the City and shall be signed in ink by the bidder with the signature in full. If the proposal is made by a partnership, its name and address and the signature and title of the person authorized to sign must be shown. If the proposal is made by a corporation, the name of the corporation, its address and the signature and title of the officer or officers authorized to sign must be shown.

The bidder shall furnish a unit price or a lump sum price as called for in the proposal. Each unit or lump sum price shall be in numerical figures for each pay item listed therein and the bidder shall also show the products of the respective unit prices and quantities written in numerical figures in the column provided for that purpose and the total amount of the proposal obtained by adding the products of the items. All figures shall be in ink or typed.

In case of a discrepancy between the unit price and its extensions, the unit price shall govern. Any omission of prices on items shown in the proposal form or any addition in writing to the form of bid or any condition, limitation or provision not officially invited in the proposal, addenda or special provisions, may render the proposal as being incomplete or modified and may become cause for rejection of the bid.

If a bidder decides to make any alternative proposal on different type of construction than one called for, it shall be enclosed on a separate sheet.

Proposal Guarantee: All proposals must be accompanied by a proposal guarantee in the form of cash, bid bond, cashier's or certified check or letter of credit drawn upon a national or state bank, payable at sight to the Treasurer of the City of Newport News, Virginia, equal to five percent (5%) of the total amount bid. Each certified check must bear the signature of an authorized representative of the bidder.

Bonds shall be furnished by a company authorized to do business in the Commonwealth of Virginia.

Upon execution of the contract and the bond, each deposit will be returned to the depositor and him only; no request for other delivery will be honored.

The City reserves the right to deposit such checks in bank, pending the award and execution of the contract, in which case the monies realized thereon will be returned to the respective bidders. No interest or other fees shall be paid by the City on bid deposits.

Delivery of Proposal: Each proposal must be submitted in a sealed envelope, properly addressed to the Director of Engineering of the City of Newport News, with the name and address of the bidder and the project title and number for which the bid is submitted, plainly written on the outside of the envelope.

All proposals shall be filed prior to the time and at the place specified in the Notice to Contractors. Any proposal received after the scheduled closing time for receipt of bids will be returned to the bidder unopened.

Bids shall be submitted intact, including all the bound Contract documents and acknowledgement of all addenda received from the City.

Revised 11/12/86

Mithdrawal or revision of proposal: A bidder may, without prejudice to himself, withdraw, modify, or correct a proposal after it has been deposited with the City provided the request is filed with the City, in writing or by written telegram, before the time set for opening proposals. The original proposal, as modified by such writing or telegraphic communication, will be considered as the proposal submitted by the bidder. No oral or telephone proposals or modifications will be considered.

No bidder will be permitted to withdraw his proposal between the closing time for receipt of bids and the execution of contract, unless the award is delayed for a period exceeding forty-five (45) calendar days or permission is given by the City to withdraw, modify or explain the proposal in accordance with Title II, Chapter 7 of the Code of Virginia.

Alternate proposals: If alternate proposals are required for a portion or all of the work due to the character of the improvement and uncertainties which may be encountered during construction, bidders shall submit alternate bids on all items as shown on the proposal. The bidder shall bid on all alternates on the proposal form as provided by the City. When bidding on an alternate for which there is no charge, the bidder shall insert the words "No Charge" in the space provided on the proposal form. The unit contract price bid shall be full compensation for furnishing all labor, tools and equipment which may be required under the several items listed and shall be a basis for final settlement.

Only the proposal for the basic contract shall be considered in the determination of the lowest and best bid. The alternate proposal or the addition and/or deduction to the unit bid shall not be considered in this determination unless it is so provided in the special provisions.

Opening of proposals: At the time and place indicated in the Notice of Contractors, each and every proposal (except any which may have been withdrawn in accordance with Article 1001.10) received prior to the scheduled closing time for receipt of proposals, will be publicly opened and read aloud.

All items and totals will be tabulated and, in event of error, the corrected totals will be considered the official totals for the bid submitted. The low bid will be determined on the basis of the aggregate sum of items as shown in the proposal.

1001.13 Rejection of proposal: The City reserves the right to reject any and all proposals (Ref. Article 1002.1.)

END OF SECTION

Section 1002

AWARD AND EXECUTION OF CONTRACT

Award of contract: The award of contract, if it be awarded, shall be made within forty-five (45) calendar days after the date of opening of bids to the lowest bidder deemed qualified and responsible by the City and who is a qualified licensed Contractor as provided by the ordinances of the City of Newport News and the State of Virginia and whose proposal shall comply with all the provisions required to render it formal.

The City reserves the right to waive any informality or technical defects; to reject any and all bids in whole or in part, and may advertise for new proposals if, in its judgement, the best interests of the City will be served.

- Execution of contract: Within ten (10) calendar days after the date the bidder receives notification of award of contract, as evidenced by receipt from the City of properly prepared Contract Documents, the bidder to whom award is made shall execute and return the contract in the required number of copies, and shall furnish a performance bond and other required bonds and insurances satisfactory to the City.
- Failure to execute contract: Failure on the part of the bidder to whom the contract is awarded to execute the contract and furnish the necessary bonds and insurances within the time specified in Article 1002.2, shall be just cause for cancellation of award, withdrawal of the contract and forfeiture of the proposal guaranty. The forfeited proposal guaranty, whether in form of a bond, check or cash deposit, will be paid to the City Treasurer, not as a penalty but as liquidated damages.

The award may then, at the discretion of the City, either be made to the next lowest qualified bidder or readvertised.

- Return of proposal guaranty: Upon the excution of the contract and approval of the bond, the proposal guaranty will be returned to the successful bidder. The proposal guaranty of unsuccessful bidders will be returned to the person or persons making the proposal immediately after the contraact and bond have been executed.
- Performance and labor and material payment bond: The Contractor shall furnish a performance bond and a labor and material payment bond (use only forms attached to proposal unless approved by City Attorney) in the amount of the contract price as

SEC. 1002 AWARD AND EXECUTION OF CONTRACT

1002.1 AWARD OF CONTRACT
1002.2 EXECUTION OF CONTRACT
1002.3 FAILURE TO EXECUTE CONTRACT
1002.4 RETURN OF PROPOSAL GUARANTY
1002.5 PERFORMANCE AND LABOR AND MATERIAL PAYMENT BONDS
1002.6 PROOF OF CARRIAGE OF INSURANCE

security for faithful performance of the work in strict conformity with the Contract Documents and for payment of all persons who perform labor and furnish materials in prosecution of the work. The surety on such bonds shall be duly authorized to do business in the Commonwealth of Virginia and satisfactory to the City.

Proof of carriage of insurance: The Contractor shall furnish the City with a certificate of insurance with a Municipal Endorsement naming the City of Newport News as additional insured. (Ref. Article 1009.8.)

END OF SECTION

SEC. 1003 SCOPE OF WORK

1003.1	INTENT OF CONTRACT
1003.2	PLANS AND SPECIFICATIONS
1003.3	ADDITIONAL INSTRUCTIONS
1003.4	CHANGES IN WORK
1003.5	CHANGED CONDITIONS
1003.6	CLAIMS FOR UNAUTHORIZED EXTRA WORK
1003.7	DISPUTED WORK
1003.8	EXTRA WORK
1003.9	PAYMENT FOR EXTRA WORK

SCOPE OF WORK

Intent of contract: The intent of the contract is to provide for the construction and completion of the work described.

The Contractor shall furnish all labor, materials, equipment, tools, transportation and supplies required to complete the work in accordance with the plans, specifications and terms of the contract.

The Contractor shall perform all work in accordance with the lines, grades, typical cross sections, dimensions and other data shown on the plans or as modified by written orders of the Engineer, and all other work determined by the Engineer as necessary to proper prosecution and completion of the project.

Plans and specifications: The plans, specifications and other Contract Documents will govern the work. The Contract Documents are intended to be complimentary and cooperative and to describe and provide for a complete project. (Ref. Article 1000.2).

While it is believed that most of the information pertaining to conditions which may affect the cost of the proposed work will be shown on the plans or indicated in the specifications, the City does not warrant the completeness or accuracy of such information. It is the Contractor's responsibility to ascertain the existence of any conditions affecting the cost of the work which would have been disclosed by reasonable examination of the site.

The Contractor shall, upon discovering any error or omission in the plans or specifications, immediately call it to the attention of the Engineer.

Additional instructions: In the event it is found that the instructions contained in the Contract Documents are not sufficiently clear to permit the Contractor to proceed with the work, the Engineer shall, either upon his own initiative or upon the request from the contractor, furnish such additional instructions as may be necessary. When such request from the Contractor, it must be in ample time to permit the preparation of the instructions and drawings by the Engineer before the construction of the work covered by them is undertaken. Such additional instructions and drawings shall be consistent with the Contract Documents and shall have the same force and effect as if contained in the Contract Documents.

1003.4 <u>Changes in work:</u>

A. Changes requested by the Contractor: Changes in specified methods of construction may be made at the Contractor's request when approved in writing by the Engineer.

Changes in the plans and specifications, requested in writing by the Contractor, which do not materially affect the work and which are not detrimental to the work or to the interests of the City, may be granted by the Engineer. Payment to be made per Section 1011 of these specifications.

B. Changes initiated by the City: The City may change the plans, specifications, character of the work, or quantity of work, provided the total arithmetic dollar value of all such changes, both additive and deductive, does not exceed 25% of the contract price. Should it become necessary to exceed this limitation, the change shall be by written supplemental agreement between the Contractor and City.

Change orders shall be in writing and state the dollar value of the change or establish method of payment, any adjustments in contract time and, when negotiated prices are involved, shall provide for the Contractor's signature indicating acceptance.

Payment for all work to be made per Section 1011 of these specifications.

Changed conditions: Should the Contractor encounter subsurface or latent physical conditions at the site differing materially from those indicated in the contract or unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract, which changed or unusual conditions will be considered by the Contractor as the basis for a claim for extra compensation, the Contractor shall promptly notify the Engineer of the alleged conditions in writing. Changed conditions that occur as a result of any negligence or inattention on the part of the Contractor or his agent shall not be considered eligible for extra payment.

If the Engineer is not given written notice within seven (7) days, the Contractor will be deemed to have waived any claim or claims for extra compensation in any manner arising out of the changed or unusual conditions.

If the City shall determine the conditions to be such as to justify a claim for additional compensation, it may provide for additional payment as specified in Article 1003.9 for the particular phase of work in question, or by any other equitable arrangement mutually agreed upon by the City and Contractor. In any event, the Contractor shall not be relieved, unless permitted to do so by the City, from his obligation of resuming construction operations pending decision as to the validity of a claim, or pending the execution of a negotiated agreement to cover additional costs if a claim shall be recognized under the provisions of this section of the specifications.

Claims for unauthorized extra work: If the Contractor performs work which he considers is not included under any of the items of the contract and which has not been specifically ordered in writing by the City as extra work, he may make a claim for extra payment for such work by immediate oral notice followed by written notice within seven (7) days after the occurrence to the City, with detailed cost data to support his claim within thirty (30) days after the said work is performed.

Should such work extend over a period of more than thirty (30) days, he shall submit monthly records of all cost data relating to the claim for extra payment of such work.

Disputed work: If unable to reach agreement under any of the foregoing procedures, the City may direct the Contractor to proceed with the work. Payment shall be as later determined.

Although not to be construed as proceeding under extra work provisions, the Contractor shall keep and furnish records of all disputed work.

1003.8 Extra work: Any extra work made necessary by alteration of or additions to the plans or by other reasons for which no price is provided in the contract, shall be performed by the Contractor as directed by the Engineer and he shall be compensated therefore as elsewhere provided herein.

Minor changes in the work not involving extra cost and not inconsistent with the purpose of the work may be made by verbal order, but no modifications involving extra work shall be made unless ordered in writing by the City.

Payment for extra work: The Contractor agrees that he will accept as full compensation for extra work, the unit prices bid, where such are applicable; and for such items as are not properly covered by unit prices, a lump sum agreed upon as reasonable by the City and the Contractor. If an agreement cannot be made on payment for extra work on a unit price or lump sum basis, the Contractor will accept as full compensation the reasonable cost, as determined by the City, of all necessary labor, including insurance and payroll taxes, equipment rental and materials, plus twenty percent (20%) which covers superintendence, the use of tools and plant,

and other overhead expenses and profit. In case the extra work is performed by a previously approved subcontractor, the total allowance which covers superintendence the use of tools and plant, and other overhead expenses and profit shall be twenty-five per cent (25%) instead of twenty per cent (20%) as stated above.

Equipment rental charges shall be the pro-rated charge actually paid by the Contractor in the case where equipment is rented, except that this rental charge shall not exceed the latest rental rates published in the Rental Rate Blue Book by National Research and Appraisal Company. If the equipment is owned by the contractor the equipment rental charge shall be pro-rated on the basis of the monthly rates published in the Rental Rate Blue Book. All fuel and lubrication costs will be paid for separately on a reimbursable basis.

The Contractor agrees to prosecute such extra work with all reasonable diligence, and to employ thereon competent men. The Contractor shall give the City access to all accounts, bills, payrolls and vouchers relating to extra work not covered by unit prices, and he agrees that he shall have no claim for compensation for such extra work in the case of items not covered by unit prices unless a statement in writing of the actual cost of the same, fully itemized as to labor and materials, is presented to the City before the thirtieth (30th) day of the month following that during which each specific order was complied with by him.

END OF SECTION

SEC. 1004 CONTROL OF WORK

1004.1 1004.2 1004.3 1004.4 1004.5 1004.6 1004.7 1004.8 1004.9 1004.10 1004.11 1004.12 1004.13 1004.14 1004.15 1004.16	DIRECTOR OF ENGINEERING'S DECISION AUTHORITY OF THE ENGINEER APPROVAL OF CONTRACTOR'S PLANS SUGGESTIONS TO CONTRACTOR AUTHORITY AND DUTIES OF INSPECTOR DISPUTED WORK RESPONSIBILITY OF THE CONTRACTOR NOTIFICATIONS RELATIVE TO CONTRACTOR'S ACTIVITIES UTILITIES AND EXISTING IMPROVEMENTS SURVEY SERVICE OTHER SURVEYORS PROTECTION OF PROPERTY TRAFFIC CONTROL PROTECTION OF WORK MAINTENANCE OF WORK AFTER ACCEPTANCE USE OF LIGHT, POWER AND WATER
1004.17	SUBSURFACE DATE
1004.18	VERBAL AGREEMENTS
1004.19 1004.20	DUST CONTROL REMOVAL OF DEFECTIVE OR UNAUTHORIZED WORK
1004.20	CLEANUP
1004.22	FINAL INSPECTION

CONTROL OF WORK

- Director of Engineering's decision: The Director of Engineering shall decide all questions which may arise as to the fulfillment of the terms of the contract by the Contractor, and as to the intent and purpose of the contract, plans and specifications. The determination of the Director of Engineering in all such matters shall be final and binding upon the parties thereto.
- Authority of the Engineer: It is understood and agreed by and between the parties hereto that the work included in the contract is to be done in accordance with the plans and specifications and to the satisfaction of the Engineer. The Engineer shall determine the unit quantities and the classification of all work done and materials furnished under the provisions of the contract.

The Engineer may appoint assistants and inspectors to inspect the materials furnished under the provisions of the contract.

Nothing contained in the contract shall be construed as requiring the Engineer to direct the method or manner of performing the work.

- Approval of Contractor's plans: The approval by the Engineer of any drawing of any method of work proposed by the Contractor shall not relieve the Contractor of any of his responsibility for any errors therein and shall not be regarded as any assumption of risk or liability by the City or any officer or employee thereof, and the Contractor shall have no claim under the contract on account of the failure or partial failure or inefficiency of any plan or method so approved. Such approval shall be considered to mean merely that the Engineer has no objection to the Contractor's using, upon his own full responsibility, the plans or method proposed.
- Suggestions to Contractor: Any plan or method of work suggested by the Engineer to the contractor, but not specified or required, if adopted or followed by the Contractor in whole or in part, shall be used at the risk and responsibility of the Contractor; and the Engineer and the City shall assume no responsibility therefor.
- Authority and duties of Inspectors: The Engineer may appoint assistants to inspect all materials used and all work done. Such inspection may extend to any or all part of the work and to the preparation or manufacture of the materials to be used. The Inspectors will not be authorized to revoke, alter, enlarge or relax the provisions of these specifications.

An Inspector may be placed on the work to keep the Engineer informed as to the progress of the work and the manner in which it is being done; also to call the attention of the Contractor to any infringements upon plans or specifications, but failure of the Inspector or the Engineer to call the attention of the Contractor to faulty work or infringements upon the plans or specifications, shall not constitute acceptance of said work.

An Inspector will not be authorized to approve or accept any portion of the work or to issue instructions contrary to the plans and specifications. The Inspector will have authority to reject defective material and to suspend any work that is being improperly done, subject to the final decision of the Engineer. The Inspector will exercise such additional authority as may, from time to time, be especially delegated to him by the Engineer.

- Disputed work: If the Contractor considers any work demanded of him to be outside the scope of the contract or considers any ruling of the Engineer to be unfair, upon such work being demanded or such ruling being made, the Contractor shall proceed without delay to perform the work or to conform to the ruling. The Contractor shall within ten days after date of receipt of the instructions or ruling, file a written protest with the Engineer, stating clearly and in detail the basis of objection, and include an itemized statement of any extra costs and additional time, if any, which may have resulted. Except for such protests or objections as are made of record in the manner herein specified and within the time limit stated, the records, rulings, instructions or decisions of the Engineer will be final and conclusive.
- Responsibility of the Contractor: The Contractor shall do all the work and furnish all labor, materials, equipment, tools and machines necessary for the performance and completion of the project in accordance with the contract documents within the specified time.

Material and construction details of plans, form, shoring, falsework and other structures built by the Contractor but not a part of the permanent project shall meet the approval of the Engineer, but such approval shall not relieve the Contractor from responsibility for their safety and sufficiency.

The Contractor shall be responsible for all expense involved in making any required changes in the plans or specifications to accommodate a substitution approved by the Engineer for the convenience of the Contractor or to circumvent an unforeseen difficulty in obtaining a specified article.

The Contractor shall assume all responsibility for the work. As between the Contractor and the City, the Contractor shall bear all losses and damages directly or indirectly resulting to him, to the City or to others on account of the character of performance of the work, unforeseen difficulties, accidents or any other cause whatsovever. The Contractor shall assume the defense and indemnify and save harmless the City, its officers and employees from all claims, liability, loss, damage and injury of every kind, nature and description, directly or indirectly resulting from the Contractor's activities in the performance of the contract, the ownership, maintenance or use of motor vehicles in connection therewith, or the acts, omissions, operations, or conduct of the Contractor or any subcontractor under the contract, or in any way arising out of the contract, irrespective of whether fault is the basis of the liability of claim, and irrespective of whether any act, omission or conduct of the City connected with the contract is a condition of contributory cause of the claimed liability, loss, damage or injury and irrespective of whether act, omission or conduct of the Contractor or subcontractor is merely a condition rather than a cause of the claim, liability, loss, damage or injury. The Contractor shall not be liable for, nor be required to defend or indemnify the City relative to claims for damage or damages resulting solely from acts or omissions of the City, its officer, agents or employees.

Notifications relative to Contractor's activities: The Contractor shall obtain prior approval from the Engineer for the closing or partial closing of any road, street, alley or other public thoroughfare. The Contractor shall give 48 hours advance notice of such closure to the City's Traffic Engineer.

The Contractor shall notify all utilities before commencing work including, but not limited to Miss Utility, gas, communications, power, water and sewer. The Contractor shall conform in all respect to the Virginia Underground Utility Damage Prevention Act.

Utilities may not be located as shown or marked as the location may have been established from records and not from on-site inspection. The Contractor shall notify utilities at least 48 hours prior to commencing work of the date on which work will commence. In order to give the utilities a reasonable opportunity to establish the location of utilities by on-site examination prior to commencing the work. The Contractor shall adhere to the above notification requirements during the progress of the work where the work is such that location of utilities is necessary as the work progresses.

The Contractor shall notify all agencies affected by the operations so as to properly coordinate and expedite the work in such a manner as to cause the least amount of conflict and interference between such operations and those of other agencies.

Notifications shall include, but not be limited to, the time of commencement and completion of work, names of streets or location of alleys to be closed, schedule of operations and routes of detours where possible.

Damage or claims resulting from improper or insufficient notification of the affected agencies shall be the responsibility of the Contractor.

Utilities and existing improvements: Any information shown as to the location of existing water courses, drains, sewer lines or utility lines which cross or are adjacent to the project, has been compiled from the best available sources, but is not guaranteed to be accurate. The Contractor shall immediately notify the Engineer of any utility, either overhead or underground, encountered during construction so that appropriate steps can be taken without additional cost to the City for delay.

The Contractor shall provide for the flow of sewers, drains or water courses interrupted during the progress of the work, and shall restore such drains or water courses as approved by the Engineer. The Contractor shall make excavations and borings ahead of work as necessary, to determine the exact location of interfering utilities or underground structures.

Ordinarily, utility companies responsible for facilites located within the right of way will be required to complete any installation, relocation, repair, or replacement prior to the commencement of work by the ontractor. However, when this is not feasible or practicable or the need for such work was not foreseen, such utility owners or the City shall have the right to enter upon the right of way and upon any structure therein for the purpose of making new installations, changes or repairs. The Contractor shall conduct operations so as to provide the time needed for such work to be accomplished during the progress of the improvement.

The Contractor shall be responsible for all costs for the repair of damage to the contract work or to any utility, previously known or disclosed during the work, as may be caused by his operations. The Contractor shall maintain in

place utilities not shown on the drawing to be relocated or altered by others and shall maintain utilities which are located by others in their relocated positions in order to avoid interference with structures which cross the project work. All costs for such work shall be included in the prices bid for the various items of work.

- 1004.10 Survey service: The Contractor shall give notice to the Engineer not less than five working days in advance of when survey services will be required in connection with the laying out of any portion of the work.
 - A. Work included: The Engineer will furnish and set construction stakes on all projects in accordance with the following unless otherwise specified.
 - (1) Grading construction: Center line stakes with finish grade slope stakes, stakes locating right of way markers, property lines, culverts and protective accessory structures as the Engineer deems necessary.
 - (2) Curb and gutter construction: Offset line and grade stakes specifying back of curb and elevation top of curb shall be set each side of the street every 50 feet on tangents and at each PT, PC and structure.
 - (3) Sewer and water line construction: Line points for location of structures and off set grade stakes.
 - B. Field control: The Engineer will furnish the Contractor all necessary information relating to lines, slopes and grades. Stakes and marks mentioned herein shall constitute the field control by and in accordance with which the Contractor shall establish other necessary controls and perform the work.
 - C. Contractor's responsibility: The Contractor will be held responsible for the preservation of all stakes and marks, and if any of the construction stakes or marks have been carelsssly or willfully destroyed or disturbed by the Contractor, the cost of replacing them will be charged against him and will be deducted from the payment for the work. It will also be the Contractor's responsibility to extend survey data as required for proper prosecution of the work. During the course of the work the Inspector shall be given access to the work for the purpose of verifying the grades and alignment of work in place.

- other surveyors: Surveying by private land surveyors on permit projects or any other work under the control of the City shall conform in all respects to the quality and practice required of the City's surveyors as set forth in Article 1004.10.
- Protection of property: The Contractor shall protect all public and private property insofar as it may be endangered by operations and take every reasonable precaution to avoid damage to such property.

The Contractor shall restore and bear the cost of any public or private improvement, facility or structure within the right-of-way which is damaged or injured directly or indirectly by or on account of any act, omission or neglect in the execution of the work and which is not designated for removal and is visibly evident or correctly shown on the plans. The Contractor shall restore to a condition substantially equivalent to that existing before such damage or injury occurred, by repairing, rebuilding or otherwise affecting restoration thereof, or if this is not feasible, make a suitable settlement with the owner of the damaged property, all at no expense to the City.

The Contractor shall give reasonable notice to occupants of buildings on property adjacent to the work to permit the occupants to remove vehicles, trailers and other possessions as well as salvage or relocate plants, trees, fences, sprinkler systems or other improvements in the right-of-way which are designated for removal or which might be destroyed or damaged by work operations.

The Contractor shall protect all designated trees and planted areas within the right-of-way or easements, and shall exercise care and conduct operations so as to minimize damages to other planted areas.

1004.13 Traffic Control:

A. Signing plan: A signing plan must be submitted and approved by Traffic Engineering before the work can begin. A sequence of construction is required as part of this signing plan.

When the work effort becomes contrary to that described in the approved signing plan, a new or revised signing plan must be submitted for approval. The Traffic engineer may alter approved signing plans when conditions indicate this need.

B. Traffic control devices: The Contractor must provide all signs, signals, lighting devices, markings, barricades, channelizing devices, hand signaling devices and flagmen and must be in conformance with the latest edition of the "Manual on Uniform Traffic Control Devices" and the

"Virginia Work Area Protection Manual." The Contractor must maintain the traffic control devices at all times in accordance with the City's approved signing plan. Generally the "Manual on Uniform Traffic Control Devices" will be adhered to. Reflectorized surfaces shall be encapsulated lens type sheeting, conforming to Section 701.02(A)2. of the 1987 Virginia Department of Transportation Road and Bridge Specifications.

This type of sheeting will be required for night time work for Contractor and City force work zones.

- Protection of Work: Until acceptance of the project, the Contractor shall at all times protect from damage all public property and private property which may be affected by the work and preserve all materials, supplies, equipment of any description, and all work already performed, from the nature of the work, the action of the elements, and damage by any person or persons or from any other cause whatsoever. Neither the city nor any of its officers, employees or agents assume any responsibility for collecting indemnity from any person or persons causing damage to the work.
- Maintenance of Work after Acceptance: Upon the request of the Contractor and with the approval of the Engineer, or upon the order of the Engineer, the Contractor will be relieved of the duty of maintaining and protecting certain portions of the work which are approved to be placed in service and which have been completed in accordance with the contract documents, including cleanup.

In addition, such action by the Engineer will relieve the Contractor of responsibility for injury or damage to said completed portions of the work resulting from use by public traffic or from the action of the elements or from any other cause, excepting injury or damage resulting from the Contractor's own operations or negligence. The Contractor will not be required to again cleanup such portions of the improvement prior to field acceptance, excepting for such items of work as result from the Contractor's operations. However, nothing in this section shall be construed as relieving the Contractor from full responsibility for making good defective work or materials found to be defective.

Use of Light, Power and Water: The Contractor shall pay for and furnish temporary light, power and water complete with connecting piping, wiring, lamps and similar equipment necessary for the work as approved. The Contractor shall install, maintain and remove temporary lines upon completion of work. The Contractor shall obtain all permits and bear all costs in connection with temporary services and facilities at no expense to the City. The Contractor's attention is specifically drawn to the fact that all use of water must be subject to the conditions of the Department of Public Utilities of the City.

Subsurface data: All information obtained by the Engineer regarding subsurface information and groundwater elevations will be available for inspection at the office of the Engineer upon request. Known utilities and structures expected to be adjacent to or encountered in the work are generally shown on the plans. Such information is offered as supplementary information only. Neither the Engineer nor the City assumes any responsibility for the completeness or interpretation of such supplementary information.

When available logs of test holes, test pits, soils reports, groundwater levels and other supplementary subsurface information are offered as the best available information of underlying materials and conditions at the locations actually tested. The City will not be liable for any loss sustained by the Contractor as a result of any variance between conditions contained in or interpretations of test reports and the actual conditions encountered during progress of the work.

THE CONTRACTOR SHALL EXAMINE THE ENTIRE CONSTRUCTION SITE AND AVAILABLE RECORDS, AS SET FORTH IN ARTICLE 1001.4. THE SUBMISSION OF A PROPOSAL SHALL BE CONCLUSIVE EVIDENCE THAT THE BIDDER HAS INVESTIGATED AND IS SATISFIED AS TO THE SUBSURFACE CONDITIONS TO BE ENCOUNTERED, AS TO THE CHARACTER, QUALITY AND QUANTITIES OF WORK TO BE PERFORMED AND MATERIALS TO BE FURNISHED AND AS TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

- 1004.18 Verbal agreements: No verbal agreement or conversation with any officer, agent or employee of the City, either before or after execution of the contract, shall affect or modify any of the terms or obligations contained in any of the documents comprising the contract. Any such verbal agreement or conversation shall be considered as unofficial information and in no way binding upon the City.
- 1004.19 <u>Dust control</u>: During all phases of the construction work, and when directed, the Contractor shall take precautions to abate dust nuisance by cleaning up, sweeping, sprinkling with water, or other means as necessary to accomplish the suppression of dust.
- 1004.20 Removal of unacceptable work: All work which does not conform to the requirements of the contract documents shall be unacceptable.

The Contractor shall remove all unacceptable and defective work and perform replacement by work and materials which conform to the contract documents or remedy otherwise in an approved manner. The provision shall have full affect regardless of the fact that the unacceptable work may have

been done or the defective materials used with the full knowledge of the Inspector. The fact that the Inspector in charge may have previously overlooked such defective work shall not consititute an acceptance of any part of such work.

THE CONTRACTOR SHALL DO NO WORK WITHOUT LINES AND GRADES HAVING BEEN GIVEN BY THE ENGINEER. WORK DONE CONTRARY TO OR REGARDLESS OF THE INSTRUCTIONS OF THE ENGINEER, WORK DONE BEYOND THE LINES SHOW OR AS DIRECTED, EXCEPT AS HEREIN PROVIDED, OR ANY EXTRA WORK DONE WITHOUT AUTHORITY, WILL BE CONSIDERED UNAUTHORIZED AND WILL NOT BE PAID FOR UNDER THE PROVISIONS OF THE CONTRACT. WORK SO DONE MAY BE ORDERED REMOVED OR REPLACED AT NO EXPENSE TO THE CITY.

In the event any defect in work is of a minor nature and the Engineer determines that it is not of such consequence as to result in a dangerous or undesirable condition, the City shall have the right to retain such work and make such deductions in the payment therefore as determined reasonable and in the public interest. Such determination by the City shall be final.

1004.21 Cleanup: From time to time as the work progresses and immediately after completion of the work, the Contractor shall clean up and dispose of off-site all refuse and unused materials of any kind resulting from the work. Upon failure to do so within twenty-four hours after directed, the work may be done by the City and the costthereof be deducted from any payment due the Contractor.

After all other work embraced in the contract is completed and before final acceptance of the contract, the entire right of way and easement area including the roadbed, planting, sidewalk, shoulders, driveways, alley and side street approaches slopes, ditches, utility trenches, and construction areas shall be neatly finished to the lines, grades and cross sections shown and as specified.

As a condition precedent to final acceptance of the project, the Contractor shall remove all equipment and temporary structures, and all rubbish, waste and generally clean up the right of way and premises to conform substantially to conditions as they existed before the commencement of work.

Final inspection: At such time as all construction work on the project is complete and all extra work bills, forms and documents required under the contract are submitted, the Contractor shall so notify the Engineer in writing. The Engineer will make an inspection of the project and project records within fifteen days of receiving said notice. If, at such inspection, all construction provided for and ordered under the contract documents is found completed and satisfactory and all certifications, bills, forms and documents have been properly submitted, such inspection shall constitute the final inspection.

If any work in whole or in part is found unsatisfactory, or it is found that all certifications, bills, forms, and documents have not been properly submitted, the Engineer will give the Contractor the necessary instruction as to replacement of material and performance or reperformance of construction work necessary and prerequisite to satisfactory final completion of construction work and will give the Contractor the necessary instructions for submission of bills, forms and documents, and the Contractor forthwith shall comply with and execute such instructions. At such time as such instructions are complied with and executed, the Contractor shall so notify the Engineer in writing. The Engineer will make another inspection within fifteen days after such notice and this inspection shall constitute the final inspection, if all requirements of the instructions have been met to the satisfaction of the Engineer. If the instructions are not completed to the satisfaction of the Engineer, additional instructions will be issued by the Engineer and the process will be repeated until the Engineer is satisfied all requirements are complied with. The inspection, when the Engineer is satisfied all requirements have been met, will be considered the final inspection.

END OF SECTION

SEC. 1005 CONTROL OF MATERIALS

1005.1	QUALITY OF MATERIALS
1005.2	SAMPLING AND TESTING
1005.3	CERTIFICATION
1005.4	INSPECTION REQUIREMENTS
1005.5	STORAGE AND PROTECTION OF MATERIALS
1005.6	TRADE NAMES, APPROVED EQUALS OR SUBSTITUTIONS
1005.7	OWNER FURNISHED MATERIALS

CONTROL OF MATERIALS

- Quality of materials: The Contractor shall use only new materials, parts, products and equipment in the work which conform to the specified requirements. The Contractor shall determine the kind of work, amount of work and other factors that may be necessary or involved in furnishing the specified products and materials. Materials and products which, after approval, have become unsuitable or unacceptable for use, regardless of cause, will be rejected by the Engineer and shall not be used.
- Sampling and testing: Tests of materials, will be made by the City in accordance with the methods described or designated in the applicable specifications, and at any time during the production, fabrication, preparation and use of the materials.

The City reserves the right to require samples and to test products for compliance with pertinent requirements irrespective of prior certification of the products by the manufacturer thereof as set forth in Section 1006 and in accordance with Section 1008.

- 1005.4 Certification: For commercial products inclusive of industry standardized products, in lieu of normal sampling and testing procedures by the Contractor and the City, the Engineer may accept from the Contractor the manufacturer's certification with respect to the product involved, under the conditions set forth in Item 1007.2B.
- Inspection requirements: The Contractor shall allow access to the Engineer or the Engineer's representatives to all parts of the work and to the plants of producers and fabricators at all times and will furnish them with every reasonable facility for ascertaining whether or not the work is in accordance with the requirements and intent of the contract documents. The Contractor shall furnish such samples as are customarily required for testing purposes at no expense to the City, unless otherwise specified.
- Storage and protection of materials: Materials shall be stored so as to assure the preservation of their quality and fitness for the work. Stored materials even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located so as to facilitate their prompt inspection. Approved portions of the right of way may be used for storage purposes and for the placing of the Contractor's plant and equipment, but any additional space required therefor shall be provided by the Contractor at his expense. The Contractor shall not use private property for storage purposes without written permission of the property owner or lessee. When requested, the Contractor shall furnish copies of such written permission to the Engineer.

Trade names, approved equals or substitutions: In order to establish a basis of quality, certain processes, types of machinery and equipment, or kinds of materials may be specified either by description or process or by designating a manufacturer by name and referring to that brand or product designation, or by specifying a kind of material. It is not the intent of the specifications to exclude other processes, equipment or materials of equal value, utility or merit.

If it is desirable to furnish items of equipment by manufacturers other than those specified, as a substitute after the contract is executed, the Contractor shall secure approval prior to placing a purchase order or furnishing the same.

If the proposal includes a list of equipment, materials, or articles for which the Contractor must name the manufacturer at the time of submission of the bid, no substitutions therefor will be permitted after a proposal has been accepted without the express consent of the City (See Section 1007).

Owner furnished materials: Any material furnished by the City will be delivered or made available to the Contractor at the locations specified or shown. The cost of handling and placing such materials after they are delivered to the Contractor will be considered as included in the contract price for the item in connection with which they are used. The Contractor will be held responsible for all material delivered to the Contractor by the City and deductions will be made from any monies due to make good any shortages, deficiencies, and damages which may occur after such delivery, and for any demurrage charges.

END OF SECTION

SEC. 1006 TESTING LABORATORY SERVICES

1006.1	DESCRIPTION
1006.2	QUALITY ASSURANCE
1006.3	PRODUCT HANDLING
1006.4	PAYMENT FOR TESTING
1006.5	CODE COMPLIANCE TESTING
1006.6	CONTRACTOR'S CONVENIENCE TESTING
1006.7	COOPERATION WITH TESTING LABORATORY
1006.8	TAKING SPECIMENS
1006.9	SCHEDULES FOR TESTING
1006.10	ALTERNATIVE INSPECTION PROCEDURE

TESTING LABORATORY SERVICES

1006.1 Description:

A. Work included:

- (1) Cooperate with the City's selected testing laboratory and all others responsible for testing and inspecting the work.
- (2) Provide other testing and inspecting as specified to be furnish by the Contractor in this section and/or elsewhere in these specifications.

B. Related work described elsewhere:

- (1) Requirements for testing may be described in various other sections of these specifications.
- (2) Where no testing requirements are described, but the City decides that testing is required, the City may direct that such testing be performed under current standards for testing. Payment for such testing will be made as described in this section.

C. Work not included:

- (1) Selection of testing laboratory: The City will select a prequalified independent testing laboratory.
- (2) Payment for testing: The City will pay for services of the testing laboratory as further described in this section.

1006.2 Quality assurance:

- A. Qualifications for testing laboratory: The testing laboratory will be qualified to the City's approval in accordance with guidelines established by the City.
- B. Codes and standards: Testing, when required, will be in accordance with pertinent codes and regulations and with selected standards of the Amercian Society for Testing and Materials, the Virginia Department of Highways and Transportation and/or other recognized industry standards. (See Section 1008.)

1006.3 Product handling: Promptly process and distribute required copies of test reports and related instructions to ensure that any necessary retesting and replacement of materials may be accomplished with the least possible delay in progress of the work.

1006.4 Payment for testing:

A. Testing services: Unless otherwise specified, the City will pay for testing services requested by the City. THIS DOES NOT APPLY TO TESTS REQUIRED BY THE CONTRACT DOCUMENTS FOR WHICH THE CONTRACTOR BEARS ALL COSTS.

When tests indicate non-compliance with the contract documents, the costs of tests associated with that non-compliance will be deducted by the City from the contract price.

- B. Retesting: When tests indicate non-compliance with the contract documents, all subsequent retesting occasioned by the non-compliance will be deducted by the City from the contract price.
- Code compliance testing: Inspections and tests required by codes and ordinances, or by a plan approval authority, and which are made by a legally constituted authority, shall be the responsibility of and shall be paid for by the Contractor, unless otherwise provided in the Contract Documents.
- 1006.6 Contractor's convenience testing: Testing and inspecting performed exclusively for the Contractor's convenience shall be the sole responsibility of the Contractor.
- 1006.7 Cooperation with testing laboratory: Representatives of the testing laboratory shall have access to the work at all times. Provide facilities for such access in order that the laboratory may properly perform its function.
- Taking specimens: Specimens and samples for testing, unless otherwise provided in the Contract Documents, will be taken by the testing personnel. Sampling equipment and personnel will be provided by the laboratory. Deliveries and specimens and samples to the testing laboratory will be performed by the testing laboratory.

1006.9 Schedules for testing:

A. Establishing the schedule: By advance discussion with the testing laboratory selected by the City, determine the time required for the laboratory to perform its tests and to issue each of its findings. Provide required time within the construction schedule.

- B. Revising the schedule: When changes of construction schedule are necessary during construction, coordinate such changes of schedule with the testing laboratory as required.
- C. Adherence to schedule: When the testing laboratory is ready to test according to the established schedule, but is prevented from testing or taking samples due to incompleteness of the work, all extra charges for testing attributable to the delay may be back-charged to the Contractor and shall not be borne by the City.
- Alternative inspection procedure: The Engineer shall have the right to require alternative inspection procedure other than as specified when, in the Engineer's judgement, other inspections are required to demonstrate compliance with the contract requirements. Cost of such alternative inspections will be borne by the City if products are found to comply, otherwise, cost shall be borne by the Contractor.

END OF SECTION

SEC. 1007 SUBMITTALS AND SUBSTITUTIONS

1007.1	DESCRIPTION
1007.2	QUALITY ASSURANCE
1007.3	SUBMITTAL
1007.4	SUBMITTAL SCHEDULE
1007.5	SHOP DRAWINGS
1007.6	MANUFACTURER'S LITERATURE
1007.7	SAMPLES
1007.8	SUBSTITUTIONS
1007.9	IDENTIFICATION OF SUBMITTALS
1007.10	COORDINATION OF SUBMITTALS
1007.11	TIMING OF SUBMITTALS
1007.12	ENGINEER'S REVIEW

SUBMITTALS AND SUBSTITUTIONS

1007.1 Description:

A. Work included: Throughout the Contract Documents, the minimum acceptable quality of workmanship and materials has been defined by manufacturer's name, reference to recognized standards, or description of required characteristics and performance.

To insure that the specified items are furnished and installed in accordance with design intent, procedures have been established for advance submittal of design data and for their review by the Engineer.

Make all submittals required by the Contract Documents. Revise and resubmit as necessary to establish compliance with the specified requirements.

B. Related work described elsewhere: Requirements for submittals are described in other pertinent sections of these specifications.

1007.2 Quality assurance:

- A. Coordination of submittals: Prior to each submittal, carefully review and coordinate all aspects of each item being submitted and verify that each item and the submittal for it adheres in all respects with the requirements for the Contract Documents. Each submittal shall have the Contractor's signature, certifying that this coordination has been performed.
- B. Certificates of compliance: Certify that all materials used in the work are in complete compliance with all specified provisions thereof. Certification shall not be construed as relieving the Contractor from his responsibility of furnishing satisfactory materials if, after tests are performed on selected samples, the material is found not to meet specified requirements.

The following information is to be shown on each certification:

- (1) Name and location of the work.
- (2) Name and address of Contractor.

- (3) Quantity and date or dates of shipment or delivery to which the certificate applies.
- (4) Name of the manufacturing or fabricating company.

Certification shall be in the form of a letter or company-standard forms containing all required data and signed by an officer of the manufacturing or fabricating company.

In addition to the above information, all laboratory test reports submitted with Certificates of Compliance shall show the following information:

- (1) Date or dates of testing.
- (2) The specified requirements for which testing was performed.
- (3) Results of the test or tests.

1007.3 Submittal:

- A. Submittal schedule: Within 30 days after award of contract, and prior to any items being submitted for approval, submit to the Engineer two (2) copies of the schedule described in Article 1007.4.
- B. Certificate of compliance: Upon completion of the work, and as a condition of its acceptance, submit to the Engineer all Certificates of Compliance.
- C. Procedures: Make all submittals in strict accordance with the provisions of this section.

1007.4 Submittal schedule:

A. General: Compile a complete and comprehensive schedule of all the submittals anticipated to be made during progress of the work. Include a list of each type of item for which Contractor's drawings, shop drawings, Certificates of Compliance, material samples, guarantees, or other types of submittals are required. Upon approval by the Engineer this schedule will become part of the contract except when specifically otherwise permitted.

- B. Coordination: The schedule is to be coordinated with all necessary subcontractors and materials suppliers to ensure their understanding of the importance of adhering to the approved schedule and their ability to so adhere. Coordinate as required to ensure the grouping of the submittals as described in Article 1007.10.
- C. Revisions: Revise and update the submittal schedule on a monthly basis as necessary to reflect conditions and sequences. Promptly submit the revised schedules to the Engineer for review and comments.

1007.5 Shop drawings:

- A. Scale and measurements: Make all shop drawings accurately to a scale sufficiently large to show all pertinent aspects of the item and its method of connection to the work.
- B. Number of copies required: Submit the number of copies which are required to be returned plus two (2) copies which will be retained by the Engineer.

1007.6 Manufacturer's literature:

- A. General: Where contents of manufacturer's literature submitted includes data not pertinent to the submittal, clearly indicate which portion of the contents is being submitted for review.
- B. Number of copies required: Submit the number of copies which are required to be returned plus two (2) copies which will be retained by the Engineer.

1007.7 Samples:

- A. Accuracy of samples: Samples shall be of the precise article proposed to be furnished.
- B. Number of samples required: Submit all samples in the quantity which is required to be returned plus one (1) which will be retained by the Engineer.

1007.8 Substitutions:

A. Approval required: The contract is based on standards of quality established in the Contract Documents.

All items proposed for use, including those specified by required attributes and performance, shall require approval by the Engineer before being incorporated into the work.

Do not substitute materials, equipment, or methods unless such substitution has been specifically approved for this work by the Engineer.

B. "Or equal": Where the phrase "or equal" or "or equal as approved by the Engineer" appears in the Contract Documents, do not assume that materials, equipment, or methods will be approved as equal unless the item has been specifically approved for this work by the Engineer.

The decision of the Engineer shall be final.

1007.9 <u>Identification of submittals:</u>

- A. General: Consecutively number all submittals.

 Accompany each submittal with a letter of transmittal containing all the pertinent information required for identification and checking of submittals.
- B. Internal identification: On the first page of each copy of each submittal, and elsewhere as required for positive identification, clearly indicate the submittal number in which the item was included.
- C. Resubmittals: When an item is resubmitted for any reason, transmit under a new letter of transmittal and with the same submittal number marked revised.
- D. Submittal log: Maintain an accurate submittal log for the duration of the contract, showing current status of all submittals at all times. Make the submittal log available for the Engineer's review upon request.

1007.10 Coordination of submittals:

- A. General: Prior to submittal for approval, use all means necessary to fully coordinate all material including, but not necessarily limited to:
 - (1) Coordinate with other trades as required.
 - (2) Clearly indicate all deviations from requirements of the Contract Documents.

B. Grouping of submittals: Unless otherwise specified, make all submittals in groups containing all associated items to ensure that information is available for checking each item when it is received. Partial submittals may be rejected as not complying with the provisions of the Contract Documents and the Contractor shall be strictly liable for all delays so occasioned.

1007.11 Timing of submittals:

- A. General: Make all submittals far enough in advance of scheduled dates for installation to provide all the time required for reviews, for securing the necessary approvals, for possible revisions and resubmittals, and for placing orders and securing delivery.
- B. Engineer's review time: In scheduling, allow at least 15 calendar days for review by the Engineer following his receipt of the submittal.
- C. Delays: Delays caused by tardiness in receipt of submittals will not be an acceptable basis for extension of the contract completion date.

1007.12 Engineer's review:

- A. General: Review by the Engineer shall not be construed as a complete check, but only that the general method of construction and detailing is satisfactory. Review shall not relieve the Contractor from his responsibility for errors which may exist.
- B. Authority to proceed: Submittals stamped "Approved" along with signature and date authorize the Contractor to proceed with fabrication, purchase, or both, of the items so noted, subject to the revisions, if any, required by the Engineer's review comments.
- C. Revisions: Make all the revisions required by the Engineer. Show each drawing revision by number, date, and subject in a revision block on the drawing. Make only those revisions directed or approved by the Engineer.
- D. Revisions after approval: When a sbumittal has been reviewed the Engineer, resubmittal for substitution of materials or equipment will not be considered unless accompanied by an acceptable letter of explanation as to why the substitution is necessary.

END OF SECTION

SEC. 1008 REFERENCE SPECIFICATIONS

1008.1	DESCRIPTION
1008.2	REVISION OF CODES OR STANDARDS
1008.3	PROCUREMENT OF ITEMS USED IN THIS WORK
1008.4	RIGHT TO REJECT NON-COMPLYING ITEMS
1008.5	AGENCIES AND ORGANIZATIONS

REFERENCE SPECIFICATIONS

1008.1 <u>Description</u>: Codes and standards which establish qualities and types of workmanship and materials, and which establish methods for testing and reporting on the relative characteristics of materials are referenced throughout the Contract Pocuments.

The Contract Documents require that materials and workmanship meet or exceed the specifically named code or standard, and it shall be the Contractor's responsibility to provide materials and workmanship which meet or exceed the specifically named code or standard.

It shall also be the contractor's responsibility to deliver to the Engineer proof that the materials or workmanship, or both, meet or exceed the requirements of the specifically named code or standard, when required by the Contract Documents or by written request from the Engineer. Submittals of the required proof shall be in the form requested in writing by the Engineer, and generally will be required to be copies of a certified report of tests conducted by an agency approved for that purpose by the Engineer.

- Revision of codes or standards: Whenever a specifically named code or standard is referenced in the Contract Documents, it shall be understood to mean the latest revision of said code or standard as amended to date of Notice to Contractors.
- Procurement of items used in this work: It shall be the Contractor's responsibility to verify the detailed requirements of the specifically named codes and standards and to verify that the items procured meet or exceed the specified requirements.
- Right to reject non-complying items: The Engineer reserves the right to reject any item used in this work which fails to meet the specified minimum requirements. Furthermore, the Engineer reserves the right to accept non-complying items subject to an adjustment in the contract price as approved by the Engineer, and without prejudice to other recourse the Engineer may take.
- Agencies and Organizations: Applicable codes and standards listed in these specifications include, but are not limited to, codes and standards published by the following:

- A. AASHTO American Association of State Highway and Transportation Officials, 341 National Press Building, Washington, D.C. 20004.
- B. ACI American Concrete Institute, Box 19150, Redford Station, Detroit, Michigan 48129.
- C. AISC American Institute of Steel Construction, Inc., 1221 Avenue of the Amercias, New York, New York 10020.
- D. ANSI American National Standards Institute, 1430 Broadway, New York, New York 10018.
- E. APWA Amercian Public Works Association, 1313 East 60th Street, Chicago, Illinois 60637.
- F. ASCE Amercian Society of Civil Engineers, 345 East 47th Street, New York, New York 10017.
- G. ASTM American Society for Testing and Materials, 1916 Race Street, Phildelphia, Pennsylvania 19103.
- H. ATBCB Architectural and Transportation Barriers Compliance Board.
- I. AWS American Welding Society, Inc., 2501 N. W. 7th Street, Miami, Florida 33125.
- J. AWWA American Water Works Association, 6666 West Quincy Avenue, Denver, Colorado 80235.
- K. BOCA Building Officials and Codes Administrators International, Inc., 17926 South Halstead Street, Homewood, Illinois 60430.
- L. CRSI Concrete Reinforcing Steel Institute, 228 North LaSalle Street, Chicago, Illinois 60610.
- M. EPA Environmental Protection Agency, headquarters or regional offices.
- N. NEC National Electric Code (see NFPA).
- O. NEMA National Electrical Manufacturers Association, 155 East 44th Street, New York, New York 10017.
- P. NFPA National Fire Protection Association, 470 Atlantic Avenue, Boston, Massachusetts 02210.
- Q. OSHA Occupational Safety and Health Administration, headquarters or regional offices.

- R. UL Underwirter's Laboratories, Inc., 207 East Ohio Street, Chicago, Illinois 60611.
- S. VDH&T Virginia Department of Highways and Transportation, 1221 East Broad Street, Richmond, Virginia 23219.
- T. Virginia Erosion and Sediment Control Handbook published by Virginia Soil and Water Conservation Commission, 830 East Main Street, Suite 800, Richmond, Virginia 23219.
- U. VTM Virginia Test Method as published by Virginia Department of Highways and Transportation.

END OF SECTION

SEC. 1009 LEGAL RELATIONS AND RESPONSIBILITIES

1009.1	BONDS
1009.2 1009.3	LAWS AND REGULATIONS ASSIGNMENT OF CONTRACT AND SUBLETTING
1009.4	SUBCONTRACTORS
1009.5	CONTRACTOR'S LIABILITY FOR EMPLOYEES
1009.6	NO WAIVER OF LEGAL RIGHTS
1009.7	OTHER CONTRACTS
1009.8	INSURANCE
1009.9	PERMITS, LICENSES AND TAXES
1009.10	ROYALTIES AND PATENTS
1009.11	DEFENSE OF SUITS
1009.12	RELEASE OF LIABILITY
1009.13	PAYMENT OF OBLIGATIONS
1009.14	PUBLIC SAFETY AND CONVENIENCE
1009.15	PERSONAL SAFETY
1009.16	DETOURS
1009.17	LABOR
1009.18	RAILROAD CROSSINGS OR RIGHT-OF-WAY
1009.19	RIGHT-OF-WAY AND EASEMENTS
1009.20	WASTE SITES
1009.21	GUARANTEE AND MAINTENANCE

LEGAL RELATIONS AND RESPONSIBILITIES

- 1009.1 <u>Bonds</u>: The Contractor shall provide and maintain performance and labor and material payment bonds as set forth in Article 1002.5.
- Laws and regulations: The Contractor shall keep himself fully informed of all Federal, State and local laws, ordinances and regulations which in any manner affects the conduct of the work. The Contractor shall at all times observe and comply with all such laws, ordinances and regulations and he shall protect and indemnify the City and its representatives against any claim or liability arising from or based on any violation of the same, whether by the Contractor, his subcontractors, suppliers of materials or services, or others engaged by the Contractor or the employees of any of them.
- Assignment of contract and subletting: No contract or any portion thereof may be assigned or sublet without the written consent of the City. This provision shall not apply to the purchase and delivery of materials necessarily manufactured and provided elsewhere.
- Subcontractors: No part of the work shall be transferred or subcontracted without prior written consent of the City, or approval at the time of award, and no such consent or approval shall release the Contractor from any obligation to the City or to persons employed by the subcontractors, or to those supplying materials to the subcontractors.
- Ontractor's liability for employees: Each and every employee of the Contractor, and each and every employee of his subcontractors engaged in the work shall, for all purposes, be deemed and taken to be the exclusive servants of the Contractor and not for any purpose or in any manner in the employment of the City. The Contractor shall in no manner be relieved from responsibility or liability on account of any fault or delay in the execution of the work, or any part thereof, by any such employee, subcontractor or material men whatsoever.
- No waiver of legal rights: No certificate given or payment made under this contract, except the final certificate or final payment, shall be evidence of the acceptability of the performance of the contract either wholly or in part, and no payment shall be construed to be an acceptance of defective work or improper materials. No act of the City or of any representative of the City in supervising the work, nor any extension of time for the completion of the work, shall be regarded or taken as an acceptance of such work, or any part thereof, or of materials used therein or therefor, either wholly or in part; but such acceptance shall be evidenced only by the final certificate of the Engineer as approved by the City.

Before any final certificate shall be allowed, the Contractor will be required, and he hereby agrees, to sign and attest on said certificate a statement that he accepts the same in full payment and settlement of all claims on account of work done and materials furnished under this contract, and furthermore that all claims for materials provided or labor performed have been paid or satisfactorily secured. No waiver of any breach of this contract by the City or any one acting for it or on its behalf shall be held as a waiver or any other or subsequent breach thereof.

- Other contracts: The City shall have the right to let other contracts be coordinated with this contract. The Contractor shall cooperate with and afford such other contractors reasonable opportunity for introduction and storage of materials and for execution of their work. Any matter of dispute shall be decided by the Director of Engineering and that decision shall be binding. If any part of the work depends for its proper execution upon the work of any such other contractor, the Contractor shall inspect and promptly report to the Engineer any defects that affect the subsequent work. Failure to do so shall constitute an acceptance of such other Contractor's work as fit and proper for the reception and attachment of the Contractor's own work and equipment.
- 1009.8 <u>Insurance</u>: The Contractor shall provide and maintain insurance as set forth in Article 1002.6.
 - Insurance Requirements and minimum limits: The General Contractor and all subcontractors shall submit, prior to final execution by the City of Contract Agreement, a Certificate of Insurance, certifying that he is carrying insurance in accordance with the following table by an insurance company authorized to do business in the Commonwealth of Virginia. Further, the City of Newport News shall be added as an additional insured on all liability policies by a separate municipal endorsement, with the exception of the workman's compensation policy wherein the City shall be added as an alternate employer by separate endorsement. The insurance and endorsement required by this contract shall be kept continuously in force during the term of this contract. Failure to keep such insurance and endorsement continuously in force will subject the contract to termination for cause. The minimum limits shown in the table below are required, but in no case shall the coverage be less than that required by State law.

Type	Insurance Coverage	Limits	
1)	Workmen's Compensation	Statutory	Į.
	Employer's Liability	\$100,000	
2)	Comprehensive General Liability with X C U and Contractual included	\$500,000	each person each occurrence in the aggregate
3)	Property Damage Liability	\$100,000	each occurrence
4)	Comprehensive Automobile Liability	\$500,000	combined single limit for bodily injury and property damage liability

5) Contractual Liability: In concurrence with the Comprehensive General Liability insurance, a contractual liability endorsement shall be executed to indemnify and save harmless the City of Newport News, Virginia, from any and all claims arising out of the performance of this contract by the Contractor or any of his agents. The limits of this coverage shall be equal to the Comprehensive General Liability limits shown above and as follows:

a.	Bodily Injury	\$500,000	each person each occurrence Aggregate
b.	Property Damage		each person Aggregate

- B. The Contractor is notified that it is the sole responsibility of the Contractor to protect the property of the City and others, by insurance or otherwise, against any special hazards such as Fire, Boiler and other Explosion, Collapse, Blasting and Underground hazards (X C U), which may be encountered in the performance of this contract.
- C. The Contractor shall have adequate Fire and Standard Extended Coverage Insurance including vandalism and malicious mischief (V & MM) with a company or companies acceptable to the City, in force on the project.

The insurance should provide protection at all times against loss by the City and Contractor until final acceptance of the work.

- D. The insurance and endorsements required by this paragraph shall be kept continously in force during the term of this contract. Failure to keep such insurance and endorsements continuously in force will subject the contract to termination for cause.
- 1009.9 Permits, licenses and taxes: The Contractor shall procure all permits and licenses, pay all charges, fees and taxes and give all notices necessary and incidental to the due and lawful prosectuion of the work.
- 1009.10 Royalties and patents: The Contractor shall indemnify and save harmless the City from all suits brought against the City by reason of infringement of patent rights on any material, machine or appliance that may be used on the work or incorporated into the finished job. The contract price shall include payment of royalties, if any.
- Defense of suits: In the event of an action at law or suit in equity is brought against the City or any of its representatives or agents for or on account of the failure, omission or neglect of the Contractor or his subcontractor or his or their employees or agents to do and perform any of the covenants, acts, matters or things by this contract undertaken or to be done or performed by the Contractor or his subcontractors, or his or their employees or agents, the Contractor shall defend, indemnify and save harmless the City, its representatives, agents and servants of and from all loss, cost, damage, expense, judgement or decrees whatever arising out of such actions of suits as may or shall be brought as aforesaid.
- Release of liability: No person or corporation other than the signer of this contract, as Contractor now has any interest hereunder, and no claim shall be made, or be valid, and neither the City or any employee or agent thereof shall be liable or be held to pay any money, except as herein before provided. The acceptance by the Contractor of the final payment shall operate as and shall be a release to the City and every representative and agent thereof, from all claims and liability to the Contractor for anything done or furnished for or relating to the work, or for any act or neglect of the City or any person relating to or affecting the work.
- 1009.13 Payment of obligations: The Contractor shall make payment promptly as due, to all persons supplying labor or materials for the prosecution of work under the contract.

Failure to make prompt payment of any claim when due, for labor or service supplied for the prosecution of work under the contract, including labor or material supplied by sub-Contractors, may necessitate City paying such claim to the person furnishing the labor or services and charging the amount of payment against funds due or to become due to the Contractor by reason of his contract. Such payment shall not relieve the Contractor of his surety from obligations with respect to any unpaid claims.

1009.14 Public safety and convenience: The Contractor shall conduct the project with proper regard for the safety and convenience of the public. When the project involves use of public ways, Contractor shall provide necessary flagmen and install and maintain means of free access to all fire hydrants, service stations, warehouses, stores, houses, garages and other property.

Private residential driveways shall be closed only with approval of the Engineer and notification to property resident. The Contractor shall not interfere with normal operation of public transit vehicles unless otherwise authorized. Contractor shall not obstruct or interfere with travel over any public street or sidewalk without approval. detours are necessary, they shall be maintained with good surface and shall be clearly marked. The Contractor shall provide open trenches, excavations, or anything that would impede the normal use of the right-of-way with adequate barricades of an approved type which can be seen from a reasonable distance. At night, the Contractor shall barricade all areas restricted from public use within the construction The Contractor shall observe all safety instructions received from the Engineer but following of such instructions shall not relieve the Contractor from the responsibility or liability for accidents to workers or damage or injury to person or property.

Emergency traffic such as police, fire and disaster units shall be provided reasonable access to the work area at all times.

The Contractor shall be liable for any damages which may result from failure to provide such reasonable access or failure to notify the appropriate authority. 1009.15 Personal safety: The Contractor shall be responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours. Safety provisions shall conform to the applicable Federal, State, county and local laws, ordinances and codes. Where any of these are in conflict, the more stringent requirement shall be followed.

The Contractor shall maintain at the office or other well-known place at the job site, all articles necessary for giving first aid to the injured and establish the procedure for the immediate removal to a hospital or a doctor's care of employees and other persons who may be injured on the job site.

The duty of the Engineer to conduct construction reviews of the Contractor's performance is not intended to include a review of the adequacy of the Contractor's safety measures in, on or near the construction site.

All accidents causing death or serious injuries or damages shall be reported immediately by telephone or messenger to the Director of **Engineering.** In addition, the Contractor shall promptly report in writing to the Engineer all accidents whatsoever arising out of, or in connection with, the performance of the work, whether on or adjacent to the site, giving full details and statements of witnesses.

If any claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Engineer, giving full details of the claim.

1009.16 <u>Detours</u>: All Detours associated with the project shall be the sole responsibility of the Contractor unless otherwise provided in the special provisions. Temporary bridges over freshly placed concrete, utilization of one or more lanes of the construction area for maintenance of traffic and such related facilities for the maintenance of traffic shall also be the responsibility of the Contractor, the costs for which shall be included in the unit contract prices unless otherwise provided in the special provisions.

Upon failure to immediately provide, maintain or remove suitable detours or detour bridges when ordered to do so by the Engineer, the City may without notice to the Contractor or his surety, provide, maintain or remove the detour and deduct the costs thereof from any payment due the Contractor.

1009.17 <u>Labor</u>: Only competent workers shall be employed on the work. Any person employed, who is found to be incompetent, intemperate, troublesome, disorderly or otherwise objectionable, or who fails or refuses to perform work properly and acceptably, shall be immediately removed from the work by the Contractor and not be reemployed on the work.

The Contractor, its agents and employees shall be bound by and comply with all applicable provisions of the Labor Code and with Federal, State and local laws related to labor.

The Contractor shall strictly adhere to the provisions of the Labor Code regarding minimum wages, the 8-hour day and 40-hour week, overtime, Saturday, Sunday, and holiday work, and non-discrimation because of race, color, sex, national origin or religion. The Contractor shall forfeit to the City the penalities prescribed in the Labor Code for violations.

In accordance with the Labor Code, the City has on file and will publish a schedule of prevailing wage rates for the types of work to be done under Federally financed and assisted construction. The Contractor shall pay not less than these rates.

1009.18 Railroad crossings or right-of-way: Whenever the project or work thereunder involves the crossing of any railroad line or the encroachment of any railroad right-of-way, the Contractor shall submit a program of proposed operations within the railroad rights of way area which shall be approved by the appropriate railroad officials and the Engineer before the work is started within such area. The Contractor shall pay for services of flagmen and/or watchmen furnished by the railroad company and provide drive piling, set cribbing, build bridges or tunnels, install enclosing pipe and do all other work required by the railroad company or necessary for the safety or maintenance of railroad traffic. The Contractor shall furnish any bond or insurance required of the City by the railroad company as a result of such intended operations and indemnify the City for any and all expenses incurred by the City, and assume any and all liability or claims thereof imposed on the City as a result of operations in the railroad right-of-way area. The Contractor shall bear all costs resulting from interferences, obstructions or liabilities set forth in this specification, whether or not herein specifically mentioned.

Right-of-way and easements: The Contractor shall confine construction activities within property lines, limits of easements and limits of construction as shown or specified in the Contract Documents, unless arrangements are made with owner(s) of adjacent private property. Prior to the use of any private property outside these specified boundaries, the Contractor shall file with the Engineer a written permission of the property owner(s).

The Contractor shall not unreasonably encumber the specified work areas with materials and equipment, and shall obtain and bear the cost of permits for special occupancy and the use of the specified work areas from the proper agencies. The Contractor shall comply with the Engineer's directions regarding signs, advertisements, fires and smoking.

1009.20 <u>Waste sites</u>: Excavated materials not suitable or not required for backfill or embankment shall be deposited on waste sites provided by the Contractor. All costs for disposing of this excess material shall be included as part of the contract bid price and at no additional cost to the City.

The Contractor shall operate the waste site in such a manner as to meet all safety and health requirements of state and local agencies. Sites, operations or the result of such operations which create a nuisance problem, or which result in damage to public or private properties will not be permitted.

The Contractor will be responsible for obtaining the necessary permits for dumping at waste sites provided by the Contractor.

1009.21 Guarantee and maintenance: The Contractor shall make all necessary repairs and replacements to remedy, in a manner satisfactory to the Engineer and at no cost to the City, any and all defects, breaks, or failures of the work occuring within one (1) year following the date of acceptance of the work due to: faulty or inadequate materials or workmanship, and for damage or disturbances to other improvements under, within, or adjacent to the work, whether or not caused by settling, washing or slipping when such damage or disturbance is caused, in whole or in part, from activities of the Contractor in performing the duties and obligations under this contract. When such defects or damage occur, within the time period described hereinbefore, in any part of the surface or subsurface work done under the contract, or in any adjacent surface or subsurface improvements notincluded in the work under the contract, the Contractor shall repair the same and the one year maintenance period required shall, with relation to such required repair, be extended one year from the date of completion of such repair.

END OF SECTION

SEC. 1010 PROSECUTION AND PROGRESS OF WORK

1010.1	CONTRACTOR'S CONSTRUCTION SCHEDULE
1010.2	PRECONSTRUCTION CONFERENCE
1010.3	NOTICE TO PROCEED
1010.4	CONTRACT TIME
1010.5	SUSPENSION OF WORK
1010.6	DELAYS AND EXTENSIONS
1010.7	LIQUIDATED DAMAGES
1010.8	CONTRACTOR'S REPRESENTATIVE
1010.9	CONTRACTOR'S EQUIPMENT
1010.10	CONFLICTS, ERRORS AND OMISSIONS
1010.11	COMPLETION OF WORK BY CITY
1010.12	USE OF IMPROVEMENT DURING CONSTRUCTION
1010.13	TERMINATION OF CONTRACT
1010.14	DEFAULT BY CONTRACTOR
1010.15	COMPLETION AND ACCEPTANCE

Section 1010

PROSECUTION AND PROGRESS OF WORK

1010.1 Contractor's construction schedule: Within fifteen (15) days after execution of contract, the Contractor shall submit a written schedule to the Engineer showing the proposed order of work and indicating the time required for completion of the major items of work. This working schedule shall take into account the passage or handling of traffic with the least practicable interference therewith and the orderly, timely and efficient prosecution of the work.

In the event that the work performed does not correspond to the schedule, the Contractor shall submit a revised schedule when requested by the Engineer. The schedule will be used as an indication of the sequence of the major construction operations and as a check on the progress of the work, but does not become a part of the Contract Documents.

1010.2 <u>Preconstruction conference</u>: A preconstruction conference will be scheduled by the City prior to the commencement of any work. The meeting is to include, but not necessarily be limited to, representatives of the following groups: City, Contractor, and affected utility companies.

The purpose of the conference will be to discuss the construction schedule set forth in Article 1010.1 and items of the work which require special coordination.

1010.3 <u>Notice to proceed</u>: Written notice to proceed will be given after the contract has been executed and the performance bond and all required insurances have been filed with and approved by the City.

The Contractor shall notify the City of the time and location that work will begin at least 48 hours prior to beginning work.

1010.4 Contract time: The contract time will begin with the date following City Council award of the specified project.

The contract time shall be in terms of calendar days unless otherwise specified.

Calendar days shall be defined as every day of every year subject to the exclusions hereinafter described.

Exclusions to the definitions of calendar days will be those days to the nearest one half day when the Contractor is prevented from performing work under the contract for one or another of the causes or reasons:

Revised 5/8/90

- 1. Acts of God as such are defined in Article 1000.2.
- 2. Epidemics, quarantine restrictions, freight embargoes and acts of the public enemy.
- 3. Periods when the work is temporarily suspended upon written order of the Engineer.
- 1010.5 Suspension of work: The City may, on its own volition in the public interest, temporarily suspend the Contractor's operations on the project or upon any part of it. In the event of such suspension, the City shall, except in emergency, give the Contractor three (3) days notice and the work shall be resumed within five (5) days after notice has been given by the City to the Contractor to do so. The City shall allow the Contractor an extension of time for completion corresponding to the total period of the temporary suspension and shall reimburse the Contractor for necessary rental of unused equipment, services of watchmen, and other unavoidable expenses Occurring by reason of the suspension without fault of Contractor. The Contractor shall not be entitled to damages, intangible for overhead costs, or anticipated profits arising from such temporary suspension.

Pursuant to Articles 1004.2 and 1004.3, the Engineer shall have authority to suspend the work wholly or in part for cause. The Engineer will have the authority to suspend the work wholly or in part due to: failure of the Contractor to correct conditions unsafe for the workers, the general public or the City's employees; for failure to properly carry out the provisions of the contract; for failure to carry out the directives of the Engineer; for such periods as the Engineer may deem necessary due to conditions considered unsuitable for the performance of the work or for any reason deemed to be in the public interest.

Pursuant to Article 1010.6, if the Contractor voluntarily suspends operations for its own purpose, an order to resume the work may not be required or issued. However, in all cases of suspension of construction operations by the Engineer, the work shall not again be resumed until permitted by order of the Engineer.

At the commencement of and during any suspension of the work, the Contractor shall be responsible for the care of the work performed and take every precaution to prevent any damage or deterioration of the work including temporary protection devices to warn, safeguard, protect, guide and inform traffic, during suspension the same as though its performance had been continuous and without interferences.

If the suspension of the work is due to failure on the part of the Contractor to correct conditions unsafe for workers or the general public, or to carry out orders given, or to perform any provisions of the contract, then and in such event, he shall be

solely responsible for making suitable provisions for necessary traffic and bear the costs of maintaining the work under the contract during the period of suspension. If the Contractor at any time fails to provide for traffic and to maintain the work, the City may immediately proceed to maintain such work and the entire cost of this maintenance will be deducted from monies due or to become due the Contractor on the contract.

The Contractor's voluntary or involuntary suspension or slowdown, with or without the approval of the Engineer, and suspension of the work ordered by the Engineer will not be grounds for claims by the Contractor for damages, idle equipment or labor or extra compensations. No allowance or compensation will be made on account of such suspensions or work except as provided hereinbefore and as provided in Articles 1010.4 and 1010.6.

The Contractor shall be responsible for damage to the work that may occur during suspensions of work the same as though the damage had occurred while the work was in progress.

1010.6 Delays and extensions: The City may grant extensions of time to the extent it finds reasonable and justified when the delay is due solely to causes beyond the control of the Contractor and subcontractors and without any fault or negligence or participation by them.

> Causes which will be given consideration for an extension of contract time include, but are not limited to, the following:

- Errors, changes or omissions in the plans, or errors or changes in the specifications caused by the City.
- Failure of the City, its representatives and its other Contractors to act promptly in carrying out obligations and duties.
- Performance of Extra Work as described in Article 1002.1.
- Court orders enjoining the prosecution of the project or an act of the City not authorized by the contract or permitted by law.
- By fire, lightning, earthquake, tornado, cyclone, hurricane, riot, insurrection of war, or by the abandonment of the work by the workmen engaged therein through no fault of the Contractor.

The City will not consider an extension of contract time based on shortage or inadequacy of labor and equipment, negligence or fault of the Contractor, and other deficiencies or lacks which are within the province of the Contractor's control or responsibility. The City will, though, consider the extension of contract time due to seasonal weather or seasonal inclement Weather.

If, in the judgement of the Engineer, insufficient force is being employed, or inadequate equipment and methods are used, or if progress is for any reason unduly delayed, the Engineer may instruct the Contractor in writing to increase the force or equipment, or adopt improved methods to expedite the work, and the Contractor shall heed and follow such instructions, but conformity to the Engineer's instructions shall not relieve the Contractor of any responsibilities under the contract.

An extension of contract time will be considered only if the Contractor has given written notice to the City within five (5) days after occurrence of the delay for which he claims allowance and if he makes claim for such extension prior to the contract completion date. The decision by the Director of Engineering of the term of any extension or denial thereof shall be final.

Liquidated Damages: TIME IS OF THE ESSENCE ON THIS CONTRACT. Failure of the Contractor to complete the work within the time allowed will result in damages being sustained by the City. Such damages are, and will continue to be, impracticable and extremely difficult to determine. For each consecutive calendar day in excess of the time specified for completion of the work (as adjusted), the Contractor shall pay to the City, or have withheld from monies due it, the sum of \$300.00, unless otherwise provided in the special provisions.

Execution of the contract under these specifications shall constitute agreement by the City and Contractor that \$300.00 per day is the minimum value of the costs and actual damage caused by failure of the Contractor to complete the work within the allotted time, that such sum is liquidated damages and shall not be construed as a penalty, and that such sum may be deducted from payments due the Contractor if such delay occurs.

Permitting the Contractor to continue and finish the work or any part thereof after the contract time or adjusted contract time, as pertinent, has expired shall in no way operate as a waiver on the part of the City or any of its rights under the contract.

Payment of liquidated damages shall not release the Contractor from obligations in respect to the fulfillment of the entire contract, nor shall the payment of such liquidated damages constitute a waiver of the City's right to collect any additional damages which may be sustained by failure of the Contractor to carry out the terms of the contract, it being the intent of the parties that said liquidated damages be full and complete payment only for failure of the Contractor to complete the work on time.

1010.8 Contractor's representative: The Contractor shall designate in writing before starting work an authorized representative, who shall have complete authority to represent and to act for the Contractor in his absence from the work site, in all directions given to him by the Engineer. The Contractor or the authorized representative shall give efficient supervision to the work, using the best skill and personal attention to the prosecution of the work, and shall be present on the site continually during its progress.

If called for in the Contract Documents, the Contractor shall maintain an office on or adjacent to the site of the project. The Contractor shall keep a complete copy of the plans and specifications on or near the site at all times. If the Contractor and the authorized representative are not present on any part of the work where it may be necessary to give instructions, directions may be given by the Engineer or his representative to the superintendent or foreperson who may have charge of that particular part of the project, and such order shall be received and followed. Such directions shall not be deemed to change the status of Contractor or subcontractor, nor to make the City an employer, nor to give the the City direct responsibility for the methods and manner of the work. Such directions of major importance will be confirmed in writing. Any direction will be so confirmed in each case on written request from the Contractor.

Incompetent, careless or negligent employees or agents who threaten public safety shall be forthwith discharged by the Contractor upon written request of the Engineer, and failure to comply with such request shall be sufficient grounds for termination of the contract.

1010.9 <u>Contractor's equipment</u>: The Contractor shall at all times employ sufficient and suitable equipment for prosecuting the work to full completion in the manner and time required by the terms of the contract.

Should the Contractor fail to furnish suitable and sufficient equipment for the proper prosecution of the work, the Engineer may suspend the work by written notice until such orders are complied with and such deficiencies are corrected as provided in Article 1010.5.

1010.10 Conflicts, errors and omissions: The Contractor shall check and compare all plans prior to construction and notify the Engineer of any discrepancies or omissions in order to permit correction by the Engineer. Coordination of plans and specifications is intended. The Contractor shall furnish labor

and materials required for the work if indicated on one and not the other as fully as if mentioned or indicated on both and should any work or materials be reasonably required or intended for carrying the project to completion which are inadvertently omitted on the plans or specifications. The Contractor shall furnish the same as fully as if particularly delineated or described.

It is understood to be the intent of the plans and specifications to show and describe a complete project within the limits shown. Dimensions shown on the plans shall be used rather than scaled measurements. Whenever it may appear that the contract plans are not sufficiently detailed or explicit, the Engineer may furnish additional detail drawings or written instructions and the Contractor shall perform the work to such additional detail drawings or written instructions. In case of conflict between the requirements set forth in the Contract Documents, the decision of the Director of Engineering shall be final.

1010.11 Completion of work by City: If the work to be done under this contract shall be abandoned by the Contractor, or if this contract shall be assigned, or the work sublet by him, otherwise than as herein specified, or if at any time the Engineer shall be of the opinion that the performance of the contract is unnecessarily or unreasonably delayed or that the Contractor is willfully or continuously violating any of the conditions or covenants of this contract, or of the specifications, or is executing the same in bad faith or not in accordance with the terms thereof; or if the work be not fully completed within the time named in this contract for its completion, or within the time to which the completion of the contract may be extended by the City, the City may notify the Contractor to discontinue all work, or any part thereof under this contract, by a written notice to be served upon the Contractor, as herein provided; and the Contractor shall, within five (5) days of the service of said notice, discontinue the work, or such part thereof, and the City shall thereupon have the power to contract for the completion of the Contract in the manner prescribed by law, or to place such and as many persons as it may deem advisable, by contract or otherwise, to work, and complete the work herein described, or such part thereof; to procure materials and equipment for the completion of the same, and to charge the expense of said labor and materials to the Contractor. expense so charged shall be deducted and paid by the City out of such monies as may be due or may at any time thereafter become due to the Contractor under and by virtue of this contract, or any part thereof. And in case such expense shall exceed the

amount which would have been payable under the contract if the same had been completed by the Contractor, the Contractor and his surety shall be liable for payment of the amount of such excess to the City.

- 1010.12 Use of improvement during construction: The City shall have the right to take possession of and use any completed or partially completed portions of the work. Such use shall not be considered as final acceptance of any portion of the work. If such prior use increases the cost of, or delays the work, the Contractor shall be entitled to such extra compensation or extension of time, or both, as the Engineer may determine.
- 1010.13 Termination of contract: All terms and conditions of the contract are considered material, and failure by the Contractor to comply with any of said terms or conditions shall, at the City's option, be deemed a breach of the contract. Upon such failure, the City shall have the right, whether an alternative right is provided or not, to declare the contract terminated. The issuance by the City of an order stating that the contract is terminated, and service of a copy of said order upon the Contractor and the Contractor's surety shall be deemed a complete termination of the contract. Upon the contract being so terminated the City may retain all sums due under the contract and both the Contractor and his sureties shall be liable under the bond for all losses, expenses and damages caused to the City be reason of failure to complete the contract and the surety shall be required, at the City's option, to complete the project. Notwithstanding such termination, the Contractor and the Contractor's sureties shall remain liable under the terms of the contract for work performed prior to such termination.
- 1010.14 Default by Contractor: If the Contractor fails to begin work as required by the contract, or be adjudged bankrupt, or make a general assignment for the benefit of his creditors, or a receiver is appointed on account of insolvency, or if at any time when work has been resumed after a Suspension of Work (pursuant to Article 1010.5) the Contractor refuses, neglects or fails to correct the deficiency(s) or reason(s) for the suspension, or if the Contractor abandons the work, the Engineer may give written notice of default to the Contractor and the Contractor's surety, and the Contractor shall discontinue or not begin the work, and any or all payments due or that may become due the Contractor may be withheld by the City until the completion by the City, surety, or another person of all work included in the contract, and until expiration of any maintenance and/or warrantee period.

After service on the Contractor of such order to desist from work or part thereof, or notice of termination as set forth in Article 1010.13, the City may take possession of the project or such designated part thereof, and may, by contract or otherwise, provide supervision of workers, materials, appliances and equipment necessary for the completion of, and may complete the project or such designated part thereof. The expense so incurred for completion of the project or part thereof, together with all damages, liquidated or otherwise sustained or to be sustained by the City shall be deducted from the fund or appropriation set aside for the purpose of the contract and shall be charged to the Contractor as if paid. In case the amount of such expenses and damages exceeds the sum which would have been payable under the contract if completed entirely by the Contractor, the amount of such excess shall be paid to the City by the Contractor and the Contractor's sureties shall be liable to the City therefore; in case the amount of such expenses and damages shall be less than the sum which would have been payable under the contract if completed entirely by the Contractor, he shall be entitled only to payment in accordance with contract terms for the work the Contractor actually performed, subject, however, to all terms of said contract.

The Contractor shall complete all work unless an order to desist as provided above has been received, and shall cooperate with and in no way hinder or interfere with forces employed by the City or others.

None of the foregoing provisions, or the provisions in Article 1010.13 shall be construed to require the City to complete the work, or to waive or in any way limit or modify the provisions of the contract relating to the fixed and liquidated damages suffered by the City on account of the failure of the Contractor to complete the project within the time prescribed.

1010.15 Completion and acceptance: After completion of all items of work specified in the contract, and completion of the final inspection as set forth in Article 1004.22, the Engineer will recommend to the Director of Engineering that the work be accepted and payment be made as provided for in Article 1011.3.

It is mutually agreed between the parties to the contract that no payment made under the contract except the final payment shall be evidence of the performance of the contract, either wholly or in part, and that no payment shall constitute an acceptance of unauthorized or defective work or improper material.

The acceptance of the contract work shall not prevent the City from making claim against the Contractor for any defective work if same is discovered within the guaranty period.

All work shall be and is guaranteed by the Contractor for a period as specified after the date of final acceptance of all the work by the City.

If, within said guaranty period, repairs or changes are required in connection with guaranteed work, which, in the opinion of the Engineer, is rendered necessary as the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the contract, the Contractor shall, promptly upon receipt of notice from the City, and without expense to the City, (a) place in satisfactory condition in every particular all of such guaranteed work, correct all defects therein; and (b) make good all damage to the building or site, or equipment or contents thereof which in the opinion of the Engineer, is the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the contract; and (c) make good any work or material, or the equipment and contents of building, structure or site disturbed in fulfilling any such guarantee.

If the Contractor, after notice, fails within ten (10) days to proceed to comply with the terms of this guarantee, the City may have the defects corrected, and the Contractor and his surety shall be liable for all expense incurred provided however, that in case of an emergency where, in the opinion of the Engineer, delay would cause serious loss or damage, repairs may be made without notice being given to the Contractor and the Contractor shall pay the cost thereof.

END OF SECTION

SEC. 1011 MEASUREMENT AND PAYMENT

1011.1	MEASUREMENT OF QUANTITIES FOR "UNIT PRICE" WORK
1011.2	'LUMP SUM'' WORK
1011.3	PAYMENT
1011.4	ACCEPTANCE OF FINAL PAYMENT
1011.5	FINAL GUARANTY

FINAL PAY VOUCHERS SHALL BE SIGNED BY THE CONTRACTOR AND CERTIFIED AS BEING PAYMENT IN FULL FOR THE CONTRACT.

- Acceptance of final payment: The acceptance by the Contractor of the final payment shall release the City and its representatives from all claims and all liability to the Contractor for all things done or furnished in connection with the work, and every act of the City and others relating to or arising out of the work. No payment, however, final or otherwise, shall operate to release the Contractor or the Contractor's sureties from obligations under the contract and the performance, payment and other bonds and warranties, as herein provided.
- Final guaranty: All work shall be and is guaranteed by the Contractor for a specified period from and after the date of final acceptance of all the work by the City.

If, within said guaranty period, repairs or changes are required in connection with guaranteed work, which, in the opinion of the Engineer is rendered necessary as the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the contract, the Conractor shall promptly upon receipt of notice from the City, and without expense to the City: (a) place in satisfactory condition in every particular all of such guaranteed work, correct all defects therein; (b) make good all damage to the building or site, or equipment or contents thereof, which in the opinion of the Engineer, is the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the contract; and (c) make good any work or material, or the equipment and contents of building structure or site disturbed in fulfilling any such guarantee.

If the Contractor, after notice, fails within ten days to proceed to comply with the terms of this guaranty, the City may have the defects corrected, and the Contractor and the Contractor's surety shall be liable for all expense incurred, provided, however, that in case of an emergency where, in the opinion of the Engineer, delay would cause serious loss or damage, repairs may be made without notice being given to the Contractor and the Contractor shall pay the cost thereof.

END OF SECTION

SECTION 1011

MEASUREMENT AND PAYMENT

Measurement of Quantities for "Unit Price" Work:

Materials and items of work which are to be paid for on
the basis of measurement shall be measured in
accordance with the methods stipulated in the
particular sections involved.

When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales or, when approved by the Engineer, on a completely automated weighing and recording system. The Contractor shall furnish the Engineer with duplicate licensed weighmaster's certificates showing the actual net weights. The City will accept the certificates as evidence of the weights delivered.

Measurements shall be in accordance with U. S. Standard Measures. A pound is an avoirdupois pound. A ton is 2,000 pounds avoirdupois. The unit of liquid measure is the U. S. gallon.

"Lump Sum" Work: Items for which quantities are indicated as "Lump Sum" ("L.S.") shall be paid for at the price indicated in the proposal. Such payment shall be full compensation for the items of work and all work appurtenant thereof.

When required by the Special Provisions or requested by the Engineer, the Contractor shall submit to the Engineer within 15 days after award of contract, a detailed schedule in triplicate, to be used only as a basis for determining progress payments on a lump sum contract or any designated lump sum bid item. This schedule shall equal in total the lump sum bid and shall be in such form and sufficiently detailed as to satisfy the Engineer that it correctly represents a reasonable apportionment of the lump sum.

Payment: Payment of all estimates, including the final, will be made only for actual quantities of work performed and materials in place as determined by the measurements of the Engineer, and this determination as to the quantities involved in any contract shall be acceptable as final, conclusive and binding upon the Contractor.

Upon the completion of the required work as called for on the plans and in the specifications should the final estimate of quantities show either an increase or decrease from the estimated quantities, then such variations will be computed at the unit price.

Payment to the Contractor for work satisfactorily performed will be made monthly. Ninety-five percent (95%) of work completed will be paid and five percent (5%) retained until the entire work has been completed and accepted.

Section 1012

PAYMENT TO SUBCONTRACTORS

- 1012.1 Within seven (7) days after receipt of amounts paid to the contractor by the City for work performed by the subcontractor under a contract, the contractor shall:
 - A. Pay the subcontractor for the proportionate share of the total payment received from the City attributable to the work performed by the subcontractor under that contract or
 - B. Notify the City and subcontractor in writing of his intention to withhold all or a part of the subcontractor's payment with the reason for non-payment.
- The contractor shall be required to pay interest to the subcontractor on all amounts owed by contractor that remain unpaid after seven (7) days following receipt by the contractor of payment from the City for work performed by the contractor under that contract, except for amounts withheld as allowed in Section 1012.1B.

Unless otherwise provided under terms of the contract, interest shall accrue at a rate of one percent (1%) per month.

- The payment and interest requirements established in Sections 1012.1 and 1012.2 shall also be required with respect to each lower-tier subcontractor.
- A contractor's obligation to pay an interest charge to a subcontractor pursuant to these provisions shall not be construed as an obligation of the City. A contract modification may not be made for the purpose of providing reimbursement for such interest nor shall any reimbursement claim include any amount for such interest charge.